Joint Legislative Audit and Review Commission

The Virginia General Assembly

Medicaid-Financed Hospital Services In Virginia

A Report in a Series
on the Virginia Medicaid Program

REPORT OF THE
JOINT LEGISLATIVE
AUDIT AND REVIEW COMMISSION

Medicaid-Financed Hospital Services in Virginia

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

SENATE DOCUMENT NO. 11

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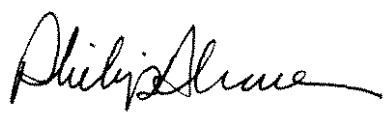
Preface

Senate Joint Resolution (SJR) 180 of the 1991 Session of the General Assembly directed the Joint Legislative Audit and Review Commission (JLARC) to study the Virginia Medicaid program and the indigent care appropriations to the State teaching hospitals and the Medical College of Hampton Roads. SJR 180 outlined 11 specific issues to be included in the study. Issues related to inpatient and outpatient hospital care are examined in this report.

The JLARC review found that the Medicaid hospital care program is conservatively managed in terms of covered services and reimbursement rates. Nevertheless, hospital services are consuming a major and growing proportion of total Medicaid program funding. To control spending growth in the future, the General Assembly should focus on developing new strategies for containing the cost of hospital services in addition to maintaining a cost-effective Medicaid program. This report contains a number of specific recommendations in these areas.

The major findings and recommendations from this study have been presented to the Joint Legislative Audit and Review Commission and to the Joint Commission on Health Care. The Joint Commission on Health Care will play a lead role in deciding how the recommendations in this report should be acted upon.

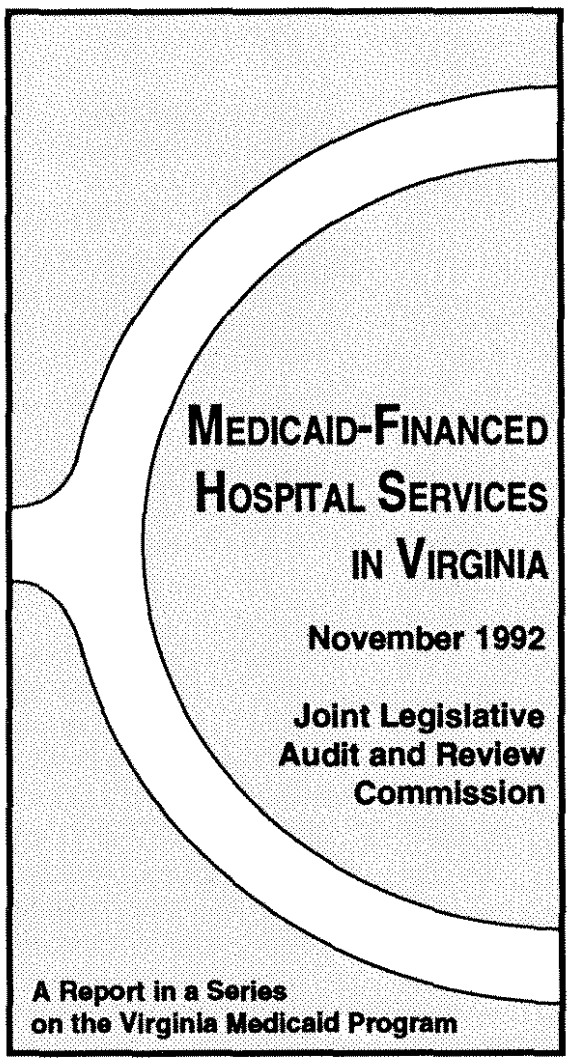
On behalf of JLARC staff, I would like to thank the Director and staff of the Department of Medical Assistance Services for their cooperation and assistance during the course of this review. In addition, I would like to thank the staff of the Health Services Cost Review Council and the Department of Health, as well as staff from 12 Virginia hospitals which we visited during the course of the study.



Philip A. Leone
Director

November 30, 1992

JLARC Report Summary



The Virginia Medicaid program provides a wide range of health care services on behalf of qualified indigent persons. In fiscal year (FY) 1991, Virginia Medicaid purchased health care for 428,650 individuals at a total cost of about $1.3 billion (including administrative expenses). Half of this cost was financed with State general funds. Between FY 1987 and FY 1991, annual Medicaid spending increased by approximately 85 percent, and the annual number of Medicaid recipients increased by about 35 percent.

In response to the rapidly escalating costs of the Medicaid program, the General Assembly passed Senate Joint Resolution (SJR) 180 during the 1991 session. SJR 180 directed the Joint Legislative Audit and Review Commission (JLARC) to conduct a comprehensive review of the Virginia Medicaid program as well as the indigent care appropriations to the State's medical teaching institutions.

The first in the series of reports on the Medicaid program examined the feasibility of using a private insurer for the program. The second report in the series, *Review of the Virginia Medicaid Program* (February 1992), provided an overview of the program and addressed issues related to access to primary care, eligibility, and the Medicaid forecast and budget process. Other reports in the series will address Medicaid ambulatory care, Medicaid long-term care, and coordination of the State's indigent health care programs.

In Virginia, Medicaid inpatient and outpatient hospital care is not extravagant. The program is conservatively managed and the services provided are, with only a few exceptions, those required by federal law. In fact, hospital providers have claimed that reimbursement has been overly conservative. In 1986 the Virginia Hospital Association (VHA) filed a lawsuit against the Commonwealth seeking to increase inpatient reimbursement rates.

As a result of a 1991 settlement agreement, no changes can be made to the hospital reimbursement systems until July 1996, except under specific circumstances. Moreover, this review did not identify problems which require immediate changes to the reimbursement systems. But the General Assembly can begin to prepare now for the possibility of reimbursement reform. Spe-

cifically, the General Assembly can set the goals of the Virginia Medicaid program and the hospital reimbursement systems to ensure that they: (1) promote access to quality health care for recipients, (2) provide adequate reimbursement for providers, and (3) are cost effective for the Commonwealth.

This report is intended to bring to the attention of the General Assembly the salient issues related to the funding and administration of Medicaid hospital care. While many of the issues cannot be addressed in the short term due to the lawsuit settlement agreement, careful planning now will ensure that Medicaid hospital care can be provided in a cost-effective manner in the future.

Program administration as it relates to inpatient and outpatient hospital care is the focus of this review. In keeping with the requirements of SJR 180, and in recognition of the General Assembly's role in guiding Medicaid policy, this report addresses:

(1) the cost effectiveness and sufficiency of hospital reimbursement,

(2) implementation of federal program requirements in the hospital setting,

(3) implications of limiting Medicaid hospital services,

(4) implications of adjusting recipients' contributions to their care,

(5) effectiveness of current utilization review procedures, and

(6) exploration of alternative administrative methods for implementing program requirements and options.

This is not the first time JLARC has examined the Medicaid program in hospitals. In 1979, JLARC published a series of reports on health care, including inpatient and outpatient hospital care. This report also serves as an update to changes in the hospital industry and the Medicaid program in hospitals since that time.

Medicaid Hospital Spending Cannot Be Controlled Through Medicaid Policy Alone

Hospital services are a major component of the Virginia Medicaid program. Medicaid spending for hospital services reached $367.4 million in FY 1991, accounting for 29 percent of total Medicaid spending for medical services. Roughly half of these expenditures were financed with State general funds. Spending for both inpatient and outpatient hospital services has increased at a faster rate than total Medicaid spending for medical services, and this growth is expected to continue in the future.

The growth in Medicaid hospital spending has been driven by multiple factors, including increases in the price of hospital care, increases in the number of Medicaid recipients, and increases in utilization of hospital services. To a limited extent, the State can control increases in Medicaid hospital spending by maintaining cost-effective reimbursement systems, by limiting services and requiring co-payments, by imposing financial control mechanisms on the reimbursement process, and by closely examining utilization of hospital services.

However, because Medicaid hospital spending is largely a function of the cost of hospital care, hospital costs must be contained if the growth in Medicaid hospital spending is to be controlled. Virginia Medicaid is a relatively minor source of revenues for most hospitals, averaging only seven percent of hospital revenues statewide. As a result, the price of hospital care cannot be controlled through Medicaid reimbursement policy alone.

Reimbursement for Inpatient Hospital Services Has Been Generally Cost Effective, But Improvements Could Be Made

In 1979, JLARC recommended that the State adopt a prospective payment system for inpatient reimbursement in order to help contain inpatient hospital costs. Under prospective payment, hospitals are paid based on pre-determined rates rather than the reported cost of providing care. Such a system was implemented in 1982, and has been in place since that time. JLARC staff analysis indicates that the inpatient reimbursement system has been cost effective for the State, although there are concerns about specific elements of the system. JLARC staff analysis also indicates that reimbursement rates have been sufficient to provide access to hospital care for Medicaid clients.

However, providers have been dissatisfied with inpatient reimbursement rates, asserting that rate increases have not been sufficient to cover the necessary costs of providing care to Medicaid clients. In 1986, the VHA filed suit against the State, claiming that inpatient reimbursement rates did not meet minimum federal requirements. In February of 1991, the VHA and the State reached an out-of-court settlement, in which the State agreed to make additional payments to hospitals through FY 1996. This settlement agreement also required the establishment of a task force by January 1995 to evaluate the existing inpatient reimbursement system.

Given the magnitude of Medicaid hospital spending, the possibility of future legal challenges, and the possibility of reimbursement reform, it is important that the General Assembly become actively involved in the future of Medicaid reimbursement. Four concerns deserve the attention of the General Assembly.

The State Should Prepare for Reimbursement Reform. Virginia's hospitals will likely demand higher Medicaid payment rates in the future. The recent history of provider lawsuits in Virginia and other states indicates that the State may have to prove to the courts that the rates it pays to hospitals are sufficient to meet the costs of efficiently and economically operated facilities. Currently, the Department of Medical Assistance Services (DMAS) and the Health Services Cost Review Council (HSCRC) are both developing efficiency indicators to measure hospital performance. However, these initiatives are being conducted independently and with limited General Assembly involvement. Considering the importance of this issue, the General Assembly should provide policy direction in the development of hospital efficiency indicators.

Special Treatment of State Teaching Hospitals Inflates the Medicaid Budget But Reduces Total General Fund Commitments. Under the current inpatient reimbursement system, the State's two teaching hospitals are reimbursed at significantly higher rates than the other acute care hospitals. However, the State is able to share the increased cost with the federal government, thereby reducing its total commitment of general funds to these institutions. In the short-term, this policy has allowed the State to conserve funds during a time of fiscal stress. The long-term implications of this policy are currently unclear, and will be reviewed in a forthcoming JLARC study on indigent health care.

Interpretation of the Federal Disproportionate Share Adjustment Policy Has Led to Higher Reimbursement than Required. Federal regulations require states to provide additional payments (disproportionate share adjustments) to hospitals that serve a relatively large percentage of Medicaid or low-income patients. Virginia has adopted a more generous disproportionate share payment policy than federal regulations require. The General Assembly may wish to address the policy question of whether to implement

a federal requirement in the least costly manner, or continue to provide support beyond federal requirements to hospitals which serve large numbers of Medicaid patients.

Medicaid Reimbursement Could Be Designed to Support Certain Rural Hospitals. In 1990, the Joint Subcommittee on Health Care for All Virginians (now the Joint Commission on Health Care) identified some rural hospitals which appeared to be experiencing fiscal stress. JLARC staff analysis indicates that some of these same rural hospitals do not fare as well as other hospitals under Medicaid's inpatient reimbursement system. The General Assembly could consider providing additional support to certain rural hospitals through Medicaid reimbursement policy.

Recommendations. *In anticipation of the revision of the Medicaid inpatient reimbursement system which is to begin in 1995, the General Assembly may wish to:*

- *ensure that legislative direction is given to DMAS and the HSCRC in the development of hospital efficiency indicators;*
- *clarify its intent for the continuation of special reimbursement policies for the State teaching hospitals, pending additional information provided in a separate JLARC report on indigent health care programs;*
- *clarify its intent for the continuation of a more generous disproportionate share adjustment policy than is required by federal law; and*
- *consider special payment rates for some rural hospitals, within budgetary constraints.*

In addition, the task force on inpatient reimbursement should:

- *consider elements of other states' reimbursement systems which could accomplish the General Assembly's objectives for Medicaid reimbursement;*
- *examine alternative methods for reimbursing capital costs; and*
- *examine alternative methods for classifying hospitals into peer groups for the purpose of reimbursement.*

Reimbursement for Outpatient Hospital Services Has Ensured Access, But Could Be More Cost Effective

Outpatient reimbursement rates have been sufficient to enlist a broad base of hospital providers. However, the outpatient reimbursement system does not provide adequate incentives for hospitals to contain costs. DMAS pays cost-based reimbursement rates for most outpatient hospital services. Under this system, providers are assured of receiving payment at the full Medicaid-allowable cost of providing the service, even if that service is provided inefficiently.

While DMAS has taken steps to improve the cost effectiveness of outpatient reimbursement, implementation of a prospective reimbursement system could lead to additional cost savings. Under prospective reimbursement, providers would receive a predetermined payment amount which would create additional incentives to contain costs.

Recommendation. *The Department of Medical Assistance Services should implement a prospective reimbursement system for Medicaid outpatient hospital services as soon as the VHA lawsuit settlement agreement will permit.*

There Is Minimal Opportunity for Cost Savings From Limiting Services or Increasing Co-Payments

The State has been modest in its coverage of Medicaid hospital services. The State has also implemented a demanding co-payment requirement. As a result, there is minimal opportunity for additional cost savings from limiting services or increasing co-payments without raising serious health policy implications. Thus, any proposals for further limits will need to be studied carefully using standard assessment criteria.

Recommendation. *The Department of Medical Assistance Services should ensure that both the executive and legislative entities involved in health policy decision making are consulted in any future proposals for service or co-payment policy changes. In addition, in its proposals DMAS should address specific issues such as cost savings, recipient and provider impacts, and legislative intent.*

Utilization Review Has Saved Money, and Could Be Expanded

The current hospital utilization review program administered by DMAS has resulted in substantial cost savings and cost avoidances for the State. However, national studies indicate that there are still a significant number of unnecessary hospital procedures which increase the cost of hospital care. At the same time, utilization of outpatient services is growing rapidly. In light of these trends, DMAS should take steps to expand its utilization review activities.

Recommendations:

- *The Department of Medical Assistance Services should study the feasibility of implementing prospective utilization review in coordination with its current utilization review activities.*

- *The Department of Medical Assistance Services should increase its utilization review activities for outpatient hospital services.*

- *If Virginia decides to modify its Medicaid hospital reimbursement methods, the Department of Medical Assistance Services should evaluate its utilization review strategies to ensure that they continue to be compatible with the incentives created by the inpatient and outpatient reimbursement systems.*

The Cost Settlement and Audit Process Should Be Improved

During the cost settlement and audit process, DMAS ensures that hospitals are reimbursed based on the approved costs for the services they provided during the previous year. These reimbursements are based on the payment rates and the principles of reimbursement established for inpatient and outpatient services. During this review, JLARC staff found evidence that six hospitals may have been overreimbursed by as much as $1.2 million in FY 1986 and FY 1987 because federal regulations were not implemented in the least costly manner. Although additional overreimbursements may have occurred, DMAS records were not organized to allow a full evaluation during the course of this review.

Recommendations:

- *The Department of Medical Assistance Services should immediately begin an examination of historical hospital cost reports and cost settlements to determine: (1) which hospitals may have been overreimbursed, (2) the amount of overreimbursement, and (3) the collectability of all identified overreimbursements. The Department should report its findings to the General Assembly by March 31, 1993.*

- *The Department of Medical Assistance Services should develop appropriate policies and procedures for automated cost settlement and audit record keeping.*

In the 1979 JLARC review of inpatient care, several recommendations were made concerning improvements to the cost settlement and audit process. Some of these have been implemented, but the process remains lengthy—typically taking more than a year to complete. There is one recommendation in this area:

Recommendation. *The Department of Medical Assistance Services should take steps to expedite the hospital cost settlement and audit process. In addition, DMAS should reconsider the recent regulatory change that lengthens the timeframe for setting the interim inpatient reimbursement rate for hospitals.*

In 1979, JLARC also recommended that additional field audits of hospitals be conducted. This recommendation has not been implemented. DMAS currently relies on the Medicare Intermediary to conduct field audits of hospitals. Hospitals selected are those with high Medicare utilization and not necessarily those with high Medicaid utilization. Therefore, some hospitals with high Medicaid utilization are not being field audited.

The few field audits that have been conducted have resulted in cost savings for the State. The five field audits reviewed by JLARC staff resulted in approximately $300,000 in additional Medicaid savings. Audits of additional hospitals with high Medicaid utilization could be expected to result in additional savings. Additional field audits could also provide the State with accurate data on hospital operating costs, which could be important if the State decides to modify Medicaid reimbursement methods.

Recommendation. *The Department of Medical Assistance Services should complete an analysis of the costs and methodology for conducting additional field audits of hospitals.*

The Joint Commission on Health Care Should Focus on Hospital Cost Containment as One Way to Control Medicaid Spending

To the extent that hospital cost increases are contained, Medicaid hospital spending may also be controlled. The General Assembly, by establishing the Joint Commission on Health Care, has created an entity which can direct a comprehensive examination of all of the factors that drive hospital costs. Further, the Joint Commission can identify public policies that may help contain these costs.

Recommendations. *In the interest of containing the price of hospital care for all purchasers including Virginia Medicaid, the Joint Commission on Health Care may wish to:*

- *Direct a study to identify the full range of factors driving hospital costs in Virginia, as well as public policies which might help to control these factors;*

- *Establish a technical advisory group on hospital data collection to ensure the availability of adequate data for policy analysis; and*

- *Continue to promote the development of a patient-level database for Virginia which could be used to educate providers about overutilization of services, and to aid the Department of Medical Assistance Services in establishing Medicaid reimbursement rates.*

Table of Contents

I. Introduction

The Virginia Medicaid program is the largest of the State's health care programs for indigent persons. In fiscal year (FY) 1991, total program expenditures reached $1.3 billion, of which the State's portion was $650 million. This report focuses on two components of the Virginia Medicaid program — inpatient and outpatient hospital care. In FY 1991, the Virginia Medicaid program spent a total of $367.4 million on hospital care — almost 29 percent of total Medicaid spending for medical services for the year.

This review has provided an opportunity to revisit the major issues from previous JLARC studies in the area of health care completed in the late 1970s. Accordingly, it serves as an update to trends and changes in the hospital industry and Medicaid-financed hospital care since that time. The following section provides an overview of relevant findings from the previous JLARC studies. Subsequent sections of this chapter describe the scope of the current study, the research methods used, and the organization of the remainder of the report.

PREVIOUS JLARC STUDIES

Four previous JLARC studies provided background for this study. In 1979, three reports, *Inpatient Care in Virginia, Outpatient Care in Virginia*, and *Certificate-of-Need in Virginia*, were reported to the General Assembly. In December of 1991, an interim report, *Review of the Virginia Medicaid Program*, was presented to JLARC and to the Joint Commission on Health Care (formerly the Commission on Health Care for All Virginians). This report was published as Senate Document No. 27 in February, 1992.

Inpatient Care in Virginia

The 1979 JLARC report on inpatient hospital care provided a broad overview of the prevailing economic forces at work in the hospital industry. In analyzing why the cost of inpatient hospital care had doubled between 1970 and 1976, the report explained that the normal economic forces of supply and demand seemed to have little impact in the hospital industry. The report concluded that insured patients were demanding medical services without much concern for costs because they were not paying the full price for the services. Hospitals were willing to provide these services because they were assured of full payment from third party payors after the services were rendered. This payment method, called retrospective payment, gave hospitals a financial incentive to overuse services.

In 1979, the Virginia Medicaid program was administered by the State Department of Health (DOH). At that time, the Medicaid inpatient reimbursement system used a retrospective payment method. The JLARC report recommended that DOH adopt a prospective payment system for inpatient services in order to provide hospitals with incentives to control costs. Under prospective payment, hospitals receive a predetermined amount of money for providing service. The premise is that if hospitals know they will receive a fixed amount of reimbursement, they will try to hold patient costs below the fixed amount.

The report also recommended that DOH become more aggressive in its Medicaid utilization review activities in order to avoid unnecessary utilization of medical services. Necessary improvements to the cost settlement and audit process were identified as well.

The report also found that the State had little direct control over hospital costs, primarily because State funding comprised only a small portion of total hospital revenues. The report identified an excess of hospital beds as an important factor in hospital cost inflation. It concluded that if Medicaid hospital costs were to be contained, hospitals would have to control their costs of providing services to all consumers. It was recommended that health planning and regulatory functions be used to reduce surplus hospital beds and services.

Outpatient Care in Virginia

The 1979 study of outpatient care focused on the 122 local health departments and their role in indigent health care. The report concluded that there was a lack of unified State policy for the delivery of outpatient services which could lead to fragmentation and duplication in programs. Further, the study found that State, federal, and local efforts in outpatient care had not been integrated, with the result being that access to outpatient services varied across the State.

Certificate-of-Need in Virginia

The State's primary mechanism for regulating the development of medical facilities and services, in 1979 and today, is the certificate-of-need law. The 1979 JLARC report on the certificate-of-need law (now called certificate-of-public-need) found that the impact of the law on health care costs could not be definitively ascertained. It was clear that the law had resulted in the avoidance of millions of dollars in capital costs since its inception in FY 1973. However, certificate-of-need, by itself, could not be expected to control health care costs because it had no impact on non-capital costs, inappropriate utilization of facilities and services, and existing maldistributions of facilities and services including excess bed capacity.

Focusing on hospitals in particular, the 1979 study concluded that certificate-of-need had been successful in curbing the growth of new hospital beds. However, DOH felt that it did not have sufficient authority to deal aggressively with the oversupply of

existing beds. It was recommended that the authority of DOH to deal with existing beds be clarified if the objectives of the law were to be satisfactorily met. A more general recommendation was that certificate-of-need should be effectively linked to other health care regulatory mechanisms, such as rate review, if health care costs were to be contained.

Review of the Virginia Medicaid Program

The February 1992 interim report included a detailed overview of Virginia Medicaid. In addition, the report examined the causes of growth in Medicaid program costs as well as the effects of Medicaid eligibility changes. The report found that the budget and forecast processes used for Virginia Medicaid were sound. However, access to primary care by the Medicaid population was particularly problematic. The report concluded that some access problems would require long-term solutions and broad strategies.

STUDY MANDATE

Senate Joint Resolution (SJR) 180 (1991) outlined eleven specific issue areas that were to be examined by JLARC (Appendix A). This report addresses the following requests from the mandate as they relate to Medicaid-financed hospital care:

- assessment of the cost savings and health policy implications of limiting the scope or duration of optional services or adjusting recipients' contributions to care;
- examination of the State's interpretation of federal requirements to determine if they have been implemented in the most effective and least costly manner;
- determination of the effectiveness of current utilization review procedures in controlling costs and exploration of additional options;
- evaluation of reimbursement methods to determine if they adequately encourage cost-effective delivery of services;
- determination of the sufficiency of reimbursement rates to provide quality care at the lowest required cost; and
- exploration of the costs of alternative administrative methods for implementing program requirements and options.

Other issues related to ambulatory and long-term care are addressed in separate reports.

RESEARCH ACTIVITIES

A number of research activities were completed during the study. The activities included: document reviews, site visits with hospitals, structured interviews, file reviews, secondary data analyses, and meetings with health care experts and professionals.

Document Reviews

To begin the review of the Medicaid program in hospitals, JLARC staff reviewed literature in the field, evaluations conducted by the U.S. General Accounting Office, studies conducted by other states and by private consultants, and U.S. Health Care Financing Administration (HCFA) documents. Reports from the U.S. Prospective Payment Assessment Commission (ProPAC) were also reviewed. ProPAC was established by the U.S. Congress in 1983. Its mission is to advise the Congress and the U.S. Secretary of Health and Human Services on matters related to Medicare hospital reimbursement as well as broader health care issues.

Other documents which provided important information during the study included the following:

- previous JLARC reports identified earlier;
- *State Plan Under Title XIX of the Social Security Act for Medical Assistance Services*;
- HCFA provider reimbursement manuals and other program manuals;
- Virginia Medicaid program manuals;
- federal budget and appropriation documents;
- State budget and appropriation documents;
- *Code of Federal Regulations*, Part 405 to Part 498; and
- *Code of Virginia*.

Site Visits with Hospitals

In order to gain an in-depth understanding of how the Medicaid program works in hospitals and its impact on their operations, ten of the 97 acute care hospitals around the State were selected for site visits. The hospitals were selected by bed size, rural/urban location, health service area, profit status, and Virginia Medicaid program utilization.

The hospitals selected for site visits are listed in Appendix B. The Medical College of Virginia Hospitals (MCVH) and the University of Virginia Medical Center (UVAMC) were also visited several times throughout the study.

Issues discussed during these visits were the hospital industry environment, Medicaid reimbursement, hospital services, utilization review, and the cost settlement and audit process for Medicaid. In addition, the site visit hospitals were asked to provide data on the impact of various Medicaid policies and procedures.

Structured Interviews

Structured interviews were conducted with a variety of entities involved in the Medicaid program. At the Department of Medical Assistance Services, interviews were conducted with the director, deputy directors, division directors, and other staff. Staff from the Auditor of Public Accounts, Department of Health, the Virginia Health Services Cost Review Council, the Medical Society of Virginia Review Organization, and the Virginia Hospital Association were also interviewed. Information collected during these meetings covered a wide range of topics including reimbursement, services, utilization review, certificate of need, hospital revenues and costs, and internal controls.

Staff of the Joint Commission on Health Care have also been kept abreast of staff research activities. Finally, other legislative entities, including staff of the House Appropriations and Senate Finance committees, were advised periodically of study issues and findings.

File Reviews

File reviews were conducted of 48 hospital cost reports. These cost reports were for the ten site visit hospitals, UVAMC, and MCVH. The cost reports were for hospital fiscal years 1988 through 1991. Information collected during these reviews included hospital reported allowable costs, hospital charges for services, and cost settlement receivables and payables. Any appeals filed by the site visit hospitals, MCVH, and UVAMC were also reviewed.

Information collected during these file reviews was used in the examination of the cost settlement and audit process. The information was also used during the evaluation of the inpatient and outpatient reimbursement systems.

Secondary Data Analyses

A variety of data were collected from the Department of Medical Assistance Services, including HCFA reports and internal expenditure reports. Data were also collected from the Health Services Cost Review Council; Department of Health; Commerce Clearinghouse, Incorporated; and the American Hospital Association.

Secondary data analyses were conducted to assess: trends in hospital expenditures, costs, revenues, and utilization; the components of Medicaid hospital reimbursement since 1982; cost settlement receivables and payables; and frequency of outpatient hospital services. A comparative analysis of Medicaid hospital services across the fifty states was also conducted.

Discussions with Health Care Experts And Professionals

Throughout this review, JLARC staff interviewed a variety of health care experts and professionals. These included staff of the U.S. Health Care Financing Administration; independent consultants; staff of the Prospective Payment Assessment Commission; and staff of Virginia's Medicare Intermediary, Blue Cross/Blue Shield of Virginia.

REPORT ORGANIZATION

This chapter has presented an overview of previous JLARC studies, the study mandate, and research activities. Because the earlier interim report, *Review of the Virginia Medicaid Program*, included a detailed description of the program, an overview has not been included in this report. Instead, Chapter II discusses trends in Medicaid hospital spending and the factors which drive spending. Chapter III reviews hospital cost trends, reasons for hospital cost increases, and the State's cost containment mechanisms. Chapter IV reviews inpatient reimbursement, while Chapter V addresses outpatient reimbursement. Chapter VI presents background and concerns with administration of the cost settlement and audit process. Chapter VII discusses Medicaid hospital services, limitations on those services, recipient co-payments, and Medicaid utilization review. A variety of information is also provided as appendixes. For example, Appendix C is a glossary of terms used throughout this report.

II. Medicaid Hospital Spending

Hospital services are a major component of the Virginia Medicaid program. Medicaid spending for hospital services reached $367.4 million in fiscal year (FY) 1991, accounting for 29 percent of total Medicaid spending for medical services. Roughly half of these expenditures were financed with State general funds. Spending for both inpatient and outpatient hospital services has increased at a faster rate than total Medicaid spending for medical services, and this growth is expected to continue in the future. Although Virginia Medicaid is a major source of expenditures for the State, it is a relatively minor payor for most hospitals.

The growth in Medicaid spending has been driven by multiple factors, including increases in the price of hospital care, increases in the number of Medicaid recipients, and increases in utilization of hospital services. Examination of these and other factors indicate that today, as at the time of the 1979 JLARC study *Inpatient Care In Virginia*, Medicaid hospital spending cannot be controlled through Medicaid program policy alone.

For example, while Medicaid reimbursement policy can be configured to minimize the impact of hospital price increases on program expenditures, the underlying growth in the price of hospital care cannot be controlled solely through Medicaid policy. Similarly, the number of Medicaid recipients and the utilization of services may be controlled to some extent by restricting eligibility, limiting services, implementing co-payments, and aggressive utilization review. But factors beyond the control of Virginia Medicaid, such as federal requirements, changing economic conditions, health status, and provider practice patterns, also influence the number of recipients using Medicaid services.

TRENDS IN MEDICAID HOSPITAL SPENDING

Medicaid hospital spending has increased rapidly. Since FY 1987, reimbursement for hospital services has grown at a faster rate than Medicaid spending as a whole. Therefore, hospital services are consuming a larger proportion of Medicaid spending for medical services. However, per-recipient spending for hospital services has increased at a more moderate pace. Most Medicaid hospital spending is in the urban areas of the State, with the State teaching hospitals being the largest providers. Annual spending for hospital care is forecasted to reach $552.6 million in FY 1994.

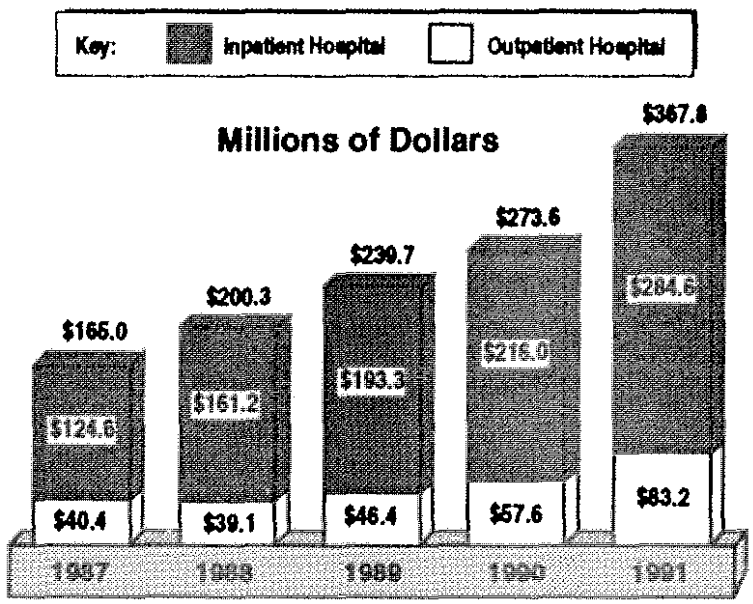
Substantial Growth in Total Spending for Hospital Services

Total annual spending for hospital services increased from $165 million in FY 1987 to $367.8 million in FY 1991 (Figure 1). Annual inpatient hospital spending grewfrom $124.6 million in FY 1987 to $284.6 million in FY 1991. Outpatient hospital expenditures increased from $40.4 million in FY 1987 to $83.2 million in FY 1991.

Growth in Medicaid hospital spending has outpaced growth in total Medicaid spending for medical services (Figure 2). Annual program-wide payments for medical

Figure 1

Medicaid Spending for Hospital Services FY 1987 - FY 1991

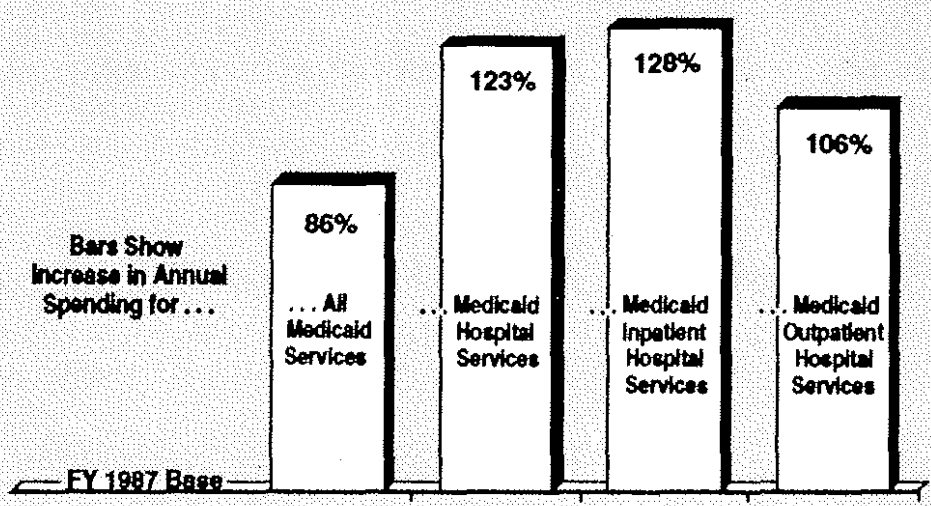


Note: State share equaled 47% in FY 1987, 49% in FY 1988 and FY 1989, and 50% in FY 1990 and FY 1991.

Source: JLARC staff analysis of DMAS internal expenditure reports.

Figure 2

Percent Growth in Medicaid Spending for Medical Services from FY 1987 to FY 1991



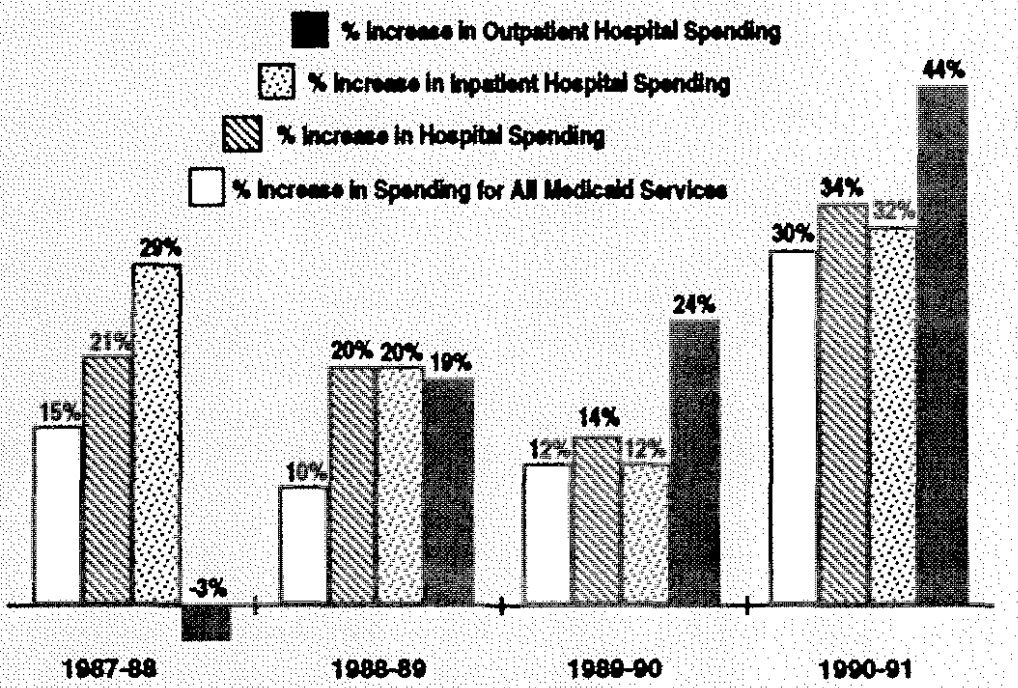
Source: JLARC staff analysis of DMAS internal expenditure reports.

services increased by 86 percent between FY 1987 and FY 1991. By comparison, annual payments for hospital services increased by 123 percent over the period. Of total hospital spending, annual inpatient hospital payments increased by 128 percent, while annual outpatient hospital payments increased by 106 percent.

The largest annual increase occurred between FY 1990 and FY 1991 (Figure 3). In FY 1991, total spending for medical services increased by 30 percent over FY 1990, in large part because of eligibility expansions. Spending for inpatient and outpatient hospital services combined increased by 34 percent. Spending for inpatient hospital services increased by 32 percent, while spending for outpatient hospital services increased by 44 percent.

Figure 3

Annual Percent Increase in Medicaid Hospital Spending Compared to Total Medicaid Spending for Medical Services, FY 1987 - FY 1991

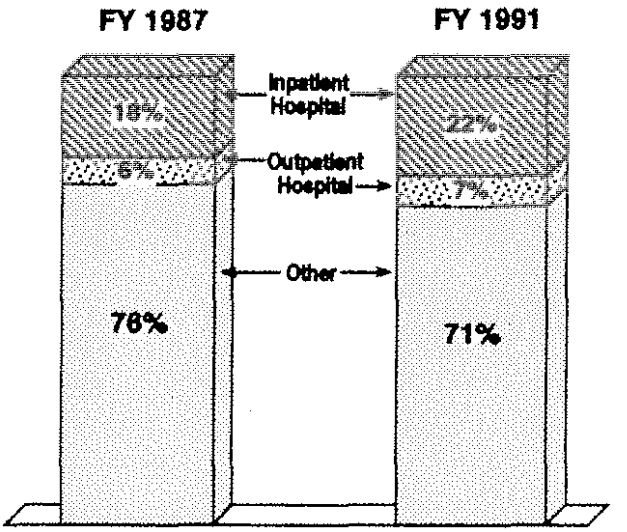


Source: JLARC staff analysis of DMAS internal expenditure reports.

As a result of the growth of hospital spending relative to overall spending, hospital services are consuming a larger proportion of Medicaid spending for medical services (Figure 4). In FY 1987 hospital payments accounted for 24 percent of total Medicaid payments for medical services, compared to 29 percent in FY 1991. Annual inpatient spending as a proportion of total spending increased from 18 percent in FY 1987 to 22 percent in FY 1991. Annual outpatient spending as a proportion of total spending increased from six percent in FY 1987 to seven percent in FY 1991.

Figure 4

Medicaid Hospital Spending as a Proportion of Total Medicaid Spending for Medical Services: Comparison of FY 1987 and FY 1991



Source: JLARC staff analysis of DMAS internal expenditure reports.

More Moderate Growth in Per-Recipient Spending

Medicaid hospital spending per recipient has not increased as rapidly as total hospital spending (Figure 5). According to State information reported to the U.S. Health Care Financing Administration (HCFA), annual inpatient hospital spending per recipient was 41 percent greater in FY 1991 than in FY 1987. By comparison, total inpatient hospital spending was 128 percent greater in FY 1991 than in FY 1987. Annual outpatient spending per recipient increased by 36 percent over the same period, compared to total growth of 101 percent.

For reporting purposes, Medicaid recipients are classified as aged (over 65 years of age), blind and disabled, children (under 21 years of age), and adults with children. In FY 1991, three of these groups — blind and disabled individuals, children, and adults with children — consumed 85 percent of inpatient hospital spending, and 90 percent of spending for outpatient services (Figure 6).

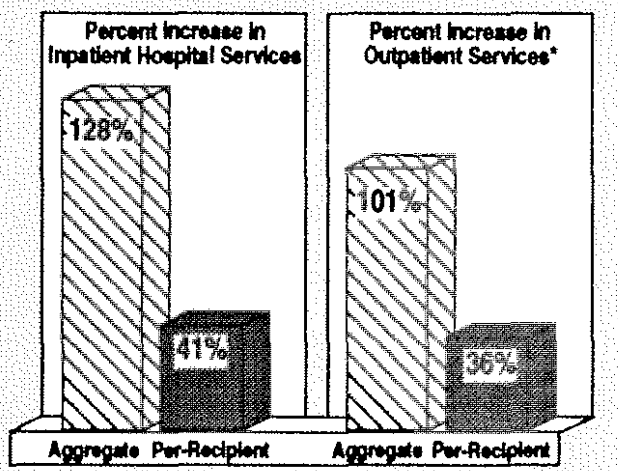
Most Expenditures Go to Urban Areas and State Teaching Hospitals

The majority of Medicaid inpatient hospital spending is for acute hospital care. Of the $284.6 million spent for inpatient services in FY 1991, $272 million, or 96 percent of the total, was for acute care. The additional four percent was for long-stay and rehabilitative hospital care.

All of Virginia's 97 acute care providers participated in the program in FY 1990 (Figure 7). Based on Department of Medical Assistance Services (DMAS) data on

Figure 5

Medicaid Hospital Services: Growth in Aggregate SpendingCompared to Growth in Per-Recipient Spending, from FY 1987 to FY 1991

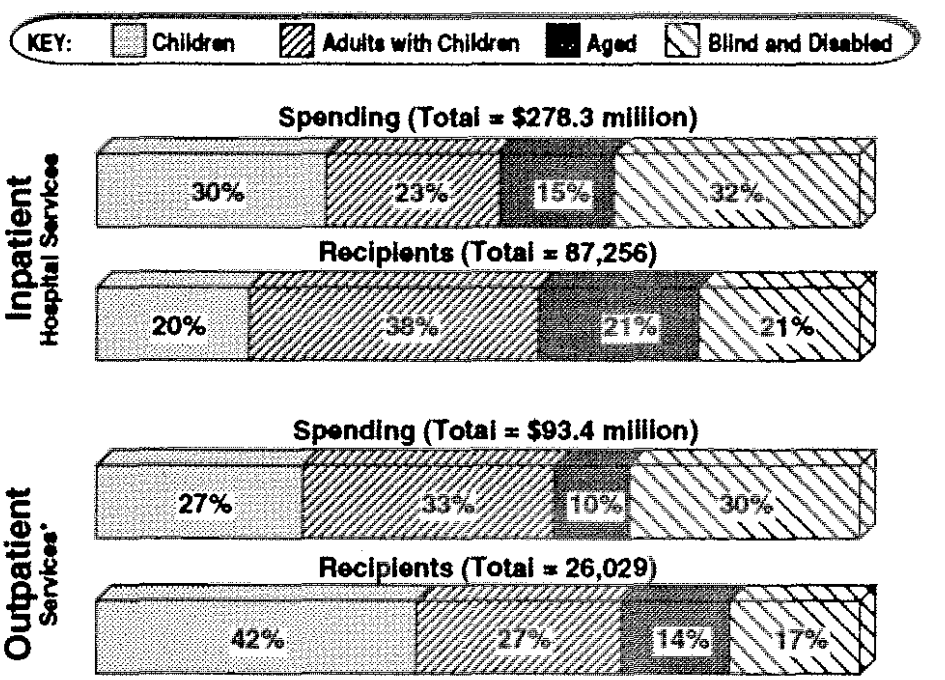


*Includes all hospital outpatient services and non-hospital outpatient services.

Source: JLARC staff analysis of HCFA 2082, Statistical Report on Medical Care: Eligibles, Recipients, Payments, and Services; State fiscal years 1987-1991.

Figure 6

Medicaid Hospital Spending by Recipient Group, FY 1991

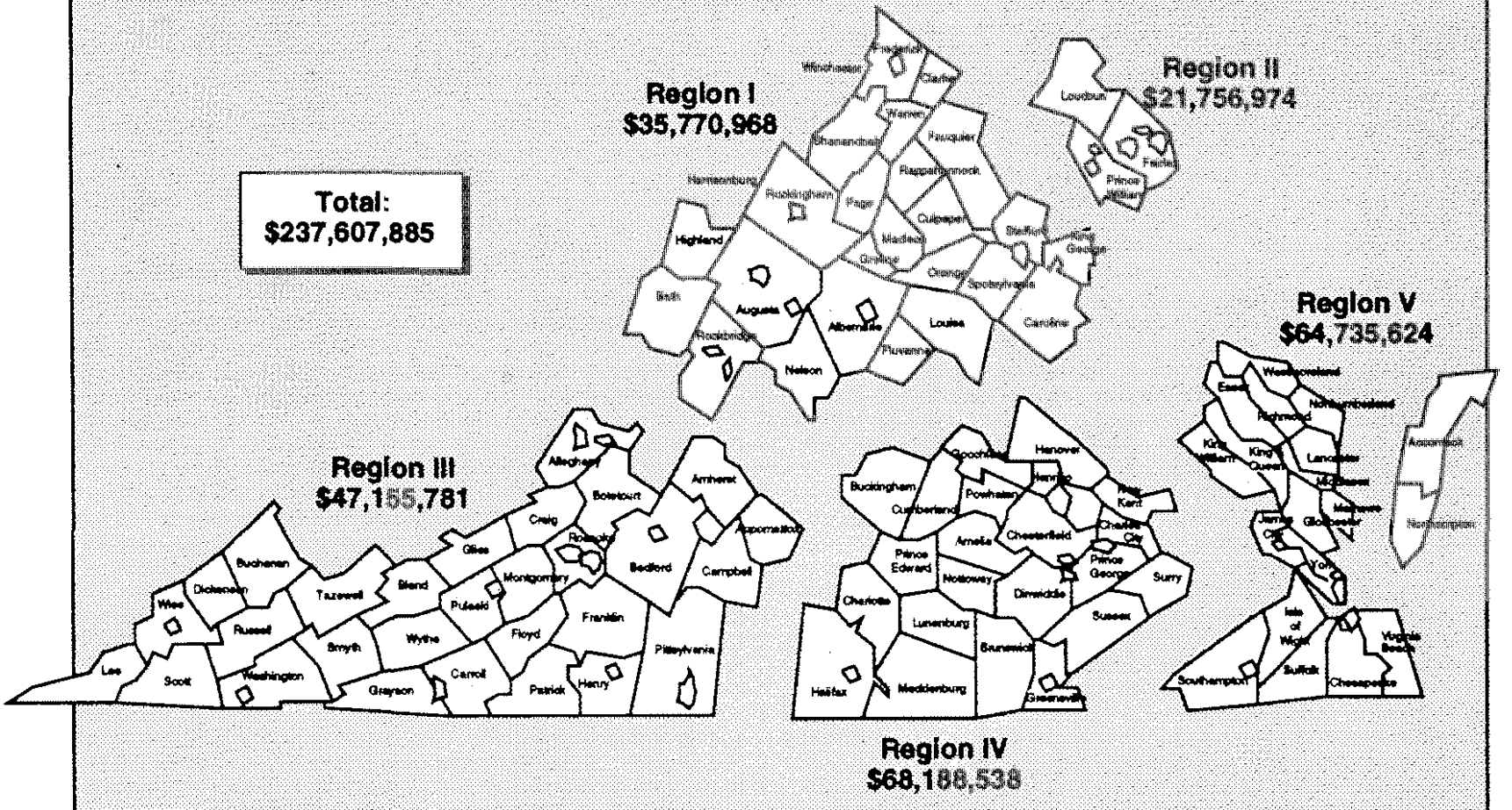


*Includes all hospital outpatient services and non-hospital outpatient services.

Source: JLARC staff analysis of HCFA 2082, Statistical Report on Medical Care: Eligibles, Recipients, Payments, and Services; State FY 1991.

Figure 7

Medicaid Spending for Acute Care Hospital Services by Health Service Area, FY 1990



Source: JLARC staff analysis of DMAS hospital payment data. Includes in-State acute care hospitals only, and is compiled according to hospital fiscal year.

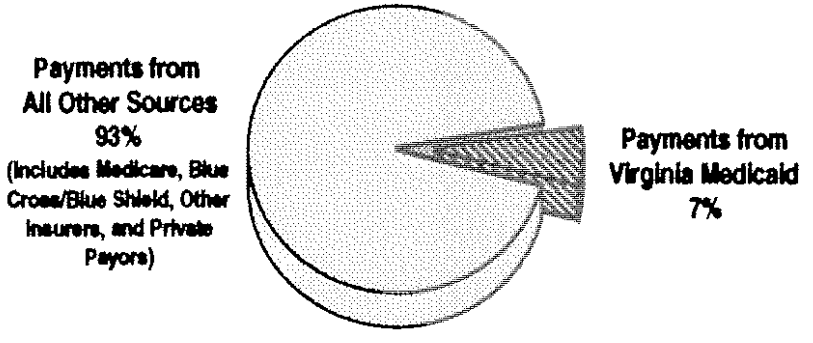
provider payments for FY 1990, most of the expenditures for inpatient and outpatient hospital services went to hospitals in health service area (HSA) IV (Richmond and Southside) and HSA V (Tidewater and Eastern Shore).

The largest providers of both inpatient and outpatient hospital care for Medicaid patients are the two State teaching hospitals (Appendix D). Together, these institutions — the Medical College of Virginia Hospitals and the University of Virginia Medical Center — consumed 28 percent of Medicaid expenditures for hospital services in FY 1990.

Although Medicaid hospital spending is a major expenditure category for the State, Medicaid payments are a relatively minor source of payments for Virginia's acute care hospital industry. Medicaid payments accounted for an estimated seven percent of net patient revenues at acute care hospitals in FY 1990 (Figure 8, and Appendix D).

Figure 8

Medicaid Hospital Payments as a Percentage of Hospital Net Patient Revenues, FY 1990



Note: Includes data for 83 acute care hospitals or hospital systems for which both net patient revenue data and Medicaid payment data were available. Medicaid payment amounts for hospital systems were aggregated from payment data for individual hospitals. Data compiled by State fiscal year.

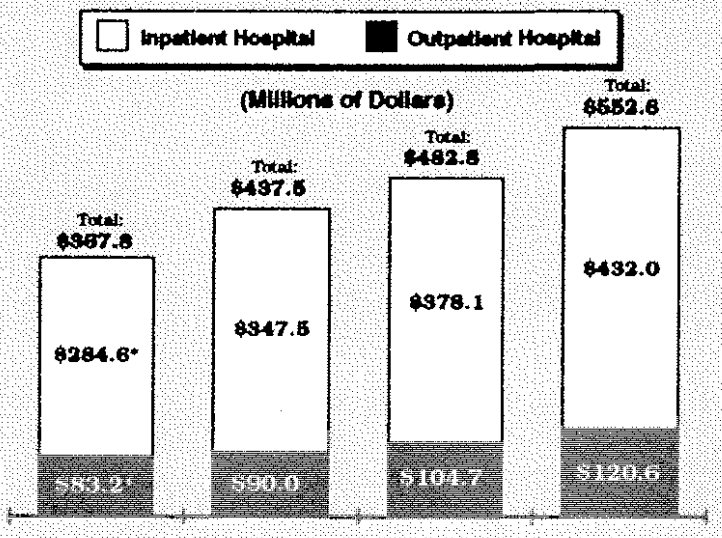
Source: JLARC staff analysis of Virginia Health Services Cost Review Council data and DMAS hospital payment data.

Continued Growth Forecasted

As of March 1992, DMAS projected that FY 1992 expenditures for hospital services would reach $437.5 million, representing an increase of 19 percent over FY 1991 spending (Figure 9). DMAS forecasted hospital spending for FY 1993 at $482.8 million, and for FY 1994, at $552.6 million.

Figure 9

Forecasted Medicaid Hospital Spending
FY 1991 - FY 1904



*Actual spending.

Source: JLARC staff analysis of DMAS forecast tracking reports, March 1992, and DMAS internal expenditure reports.

SOURCES OF GROWTH IN MEDICAID HOSPITAL SPENDING

Inflation in the price of hospital services has contributed to increased Medicaid hospital spending. Another reason for spending increases is that Virginia Medicaid serves more recipients now than it has in the past. There are other factors which impact Medicaid hospital spending as well, including increases in utilization of hospital services.

These factors — hospital price inflation, more recipients, increased utilization of services, and others — were analyzed to estimate their impact on Medicaid hospital spending growth between FY 1987 and FY 1991. This analysis indicates that most of the growth in Medicaid hospital spending could be attributed to inflation in the price of care and increased numbers of recipients. A lesser, but substantial, portion of the growth could be attributed to increases in the utilization of services and other factors.

Overall Impact of Growth Factors

Based on information reported to HCFA by DMAS, annual Medicaid spending for inpatient hospital services and all outpatient services (including hospital-based and other outpatient services) increased from $169.6 million in FY 1987 to $371.7 million in FY 1991. This represented a total increase in annual spending of $202.1 million or 119

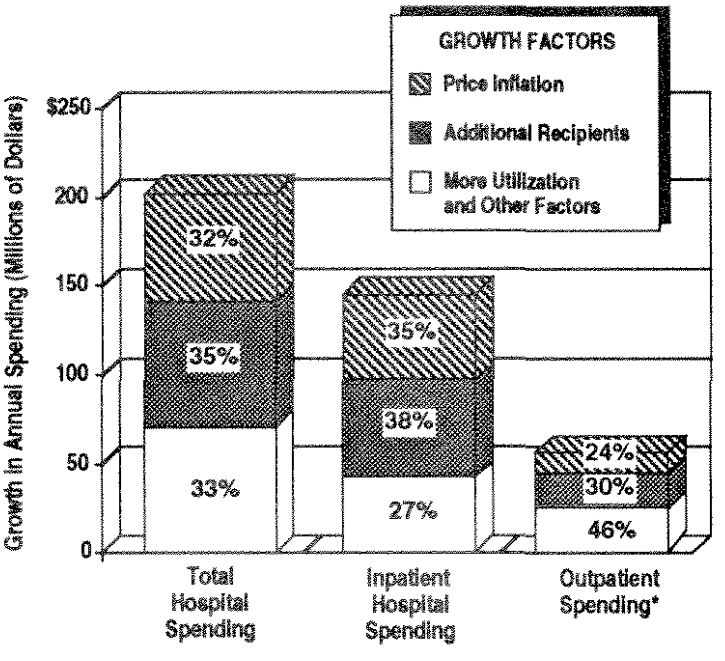
percent. JLARC staff estimate that 32 percent ($64 million) of the total increase in annual spending could be attributed to inflation in the price of hospital care (Figure 10). An additional 35 percent ($72.1 million) could be attributed to increases in the number of recipients served. The remaining 33 percent ($66 million) could be attributed to increased utilization of services and other factors.

Impact of Price Inflation. The impact of hospital price inflation was analyzed using the consumer price index for medical services (MCPI) as the inflation measure. The MCPI increased by 37.8 percent between FY 1987 and FY 1991. Annual inpatient hospital spending increased by $144.8 million between FY 1987 and FY 1991. Multiplying FY 1987 inpatient hospital spending by one plus the inflation factor of 37.8 percent, it is estimated that spending increased by $50.4 million due to price inflation alone. This figure represents 35 percent of the total increase in inpatient hospital spending between FY 1987 and FY 1991.

Because recipient data were not available for hospital outpatient services, spending for all outpatient services was used in this analysis. (Outpatient hospital spending represents approximately 90 percent of spending for all outpatient services.)

Figure 10

Estimated Sources of Growth in Annual Medicaid Hospital Spending from FY 1987 to FY 1991



*Includes all hospital outpatient services and non-hospital outpatient services.

Source: JLARC staff analysis of HCFA 2082, Statistical Report on Medical Care: Eligibles, Recipients, Payments, and Services; State fiscal years 1987-1991.

Spending for all outpatient services increased by $57.3 million between FY 1987 and FY 1991. Applying the inflation factor of 37.8 to FY 1987 outpatient spending, it is estimated that outpatient spending increased by $13.6 million due to price inflation alone. This figure amounts to 24 percent of the total increase in outpatient spending between FY 1987 and FY 1991.

The estimates for inpatient and outpatient services were combined to produce the estimate of the impact of price inflation on total spending. Price inflation accounted for an estimated $64 million, or 32 percent, of the increase in annual Medicaid spending for inpatient hospital services and outpatient services between FY 1987 and FY 1991.

It is important to note that the MCPI is a general indicator of inflation in the price of services purchased by Virginia Medicaid. It should not be assumed from this analysis that average hospital prices actually increased at the rate of the MCPI. The MCPI was chosen for this analysis because it is a commonly used consumer price index for medical care, and because it appeared to be the best single indicator for estimating the impact of inflation in both the inpatient and outpatient settings. If another inflation index had been chosen, the estimated impact of cost inflation could be greater than or less than the estimate given here.

It is also important to recognize that Virginia Medicaid does not actually increase its payments to providers according to the growth in MCPI. Virginia Medicaid uses a prospective inpatient reimbursement system which utilizes a different annual inflation factor than the MCPI. Medicaid outpatient reimbursement, for the most part, pays hospitals for their reported costs of providing outpatient services. The Medicaid reimbursement systems will be explained in detail in Chapters IV and V.

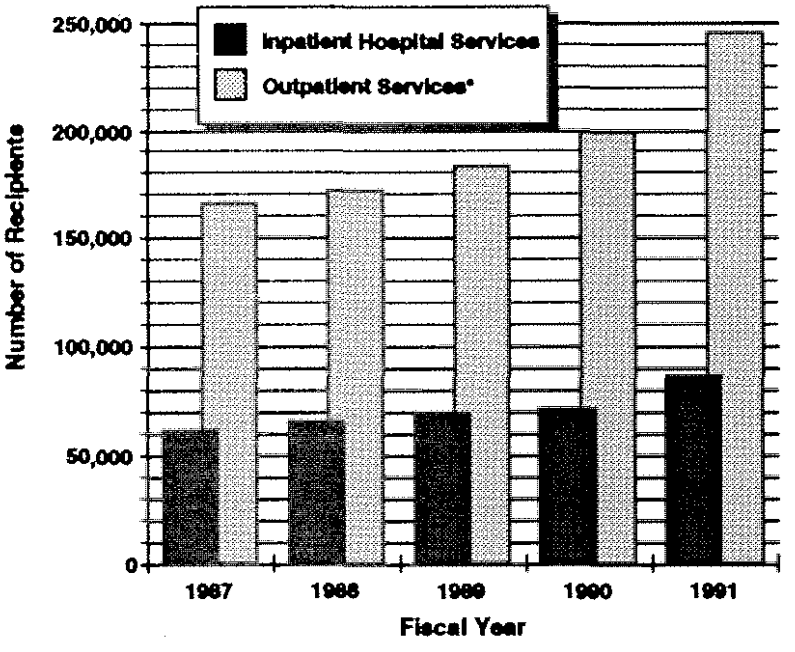
Finally, hospital prices increase for a variety of reasons. Some factors, such as increases in prevailing wage rates and the cost of commonly used pharmaceuticals, are largely beyond the direct control of individual hospitals. Other factors, such as management decisions about service mix, labor mix, and use of facilities, are within the control of hospitals. Hospital cost trends and possible reasons for hospital price inflation will be examined in more detail in Chapter III.

Impact of More Recipients. The annual number of inpatient hospital recipients increased by 41 percent between FY 1987 and FY 1991 (Figure 11). The annual number of outpatient service recipients increased by 48 percent over this same period. The increase in annual Medicaid spending due to additional recipients alone was estimated to be $54.8 million for inpatient hospital services and $17.3 million for outpatient hospital services.

These estimates were derived by multiplying the per-recipient cost of inpatient and outpatient services in FY 1987 by the respective number of recipients for each service in FY 1991. The resulting calculation provides an estimate of the increase in total spending due to more recipients. The combined increase of $72.1 million ($54.8 million plus $17.3 million) accounts for 35 percent of the total increase in Medicaid hospital spending between FY 1987 and FY 1991.

Figure 11

Annual Number of Recipients of Medicaid-Financed Hospital Care, FY 1987 - FY 1991



*Includes all hospital outpatient services and non-hospital outpatient services.

Source: JLARC staff analysis of HCFA 2082, Statistical Report on Medical Care: Eligibles, Recipients, Payments, and Services; State fiscal years 1987-1991.

As indicated in the JLARC interim report, *Review of the Virginia Medicaid Program*, Virginia has relatively strict eligibility guidelines. However, federally mandated program expansions have resulted in significant increases in the number of people eligible for Medicaid benefits. Major new categories of eligibles added since 1988 include certain groups of infants, pregnant women, children, and qualified Medicare beneficiaries. These expansions contributed to a 32 percent increase in the number of people eligible for Medicaid benefits between FY 1987 and FY 1991.

The increase in the number of Medicaid eligibles has fueled the increase in recipients of hospital care, particularly in FY 1991. As noted earlier, the largest year-to-year increase in Medicaid hospital spending occurred between FY 1990 and FY 1991. The largest year-to-year increase in recipients of hospital care also occurred between FY 1990 and FY 1991. The number of Medicaid recipients receiving inpatient hospital care increased by 21 percent between FY 1990 and FY 1991. The number of recipients receiving outpatient services increased by 23 percent.

Impact of Utilization and Other Factors. Increases in the number of recipients and hospital prices account for an estimated 67 percent, or $136.1 million, of the total

increase in annual Medicaid hospital expenditures between FY 1987 and FY 1991. The other 33 percent could be attributed to changes in the volume of services, changes in the intensity of services, and other factors (including measurement error from estimates of the impact of more recipients and inflation).

In general, the volume of services refers to the number of admissions or visits for a given recipient. Service intensity refers to the amount of services provided to patients during a given visit or admission. Service intensity can be conceptualized as having two components. One component is the amount of resources required to treat a patient with a given ailment. Another component is the amount of services delivered beyond what is medically necessary, or "overutilization."

Due to a lack of data, it is difficult to specify actual changes in service volume and intensity for Medicaid patients. As will be explained in Chapter III, there is evidence that nationally, the intensity of resources required to treat Medicare inpatients has been increasing. While Medicare maintains a case mix indicator to track these increases, Virginia Medicaid does not utilize a case mix indicator for its clients. (However, some site visit hospital administrators reported that the hospitals use the Medicare case mix index to monitor the intensity of services delivered to Medicaid patients.)

As will also be explained in Chapter III, health care experts have suggested that overutilization is an important factor in hospital cost inflation. To the extent that Medicaid patients might be receiving unnecessary services, Virginia Medicaid might be paying more than it needs to for hospital services. Medicaid utilization review is designed to ensure that patients are provided hospital services in keeping with industry norms. However, utilization review programs are not typically designed to relate utilization of services to quality of outcomes.

Multidimensional Approach to Cost Containment Required

Hospital price inflation, increasing numbers of Medicaid recipients, increasing utilization of services, and other factors have all contributed to the growth in Medicaid hospital spending. These factors are also expected to continue to drive up Medicaid hospital spending. According to DMAS's projections, roughly two-thirds of the forecasted increase in spending for the 1992-1994 biennium is expected to occur because of inflation in the amount paid for services. Roughly one-third of the forecasted increase is due to increases in both the number of Medicaid recipients and the number of services used by those recipients. In order to control Medicaid spending increases, the State will need to manage the impact of hospital price inflation as well as the number of Medicaid recipients and the services they use.

Managing Price Inflation. One way to manage the impact of hospital price inflation is to maintain cost-effective reimbursement policies. As noted earlier, Virginia Medicaid is a relatively minor source of revenues for Virginia's hospital industry, with little leverage to change hospital operating patterns. As long as hospital prices continue to rise, Virginia Medicaid costs will continue to rise to some degree as well. While a

comprehensive evaluation of the State's role in containing hospital prices goes beyond the scope of this report, Chapter III reviews hospital cost trends, reasons for hospital cost increases, and the status of Virginia's major cost containment mechanisms.

As noted, the impact of hospital price inflation on Medicaid spending can be managed to a limited degree through Medicaid reimbursement policies. Virginia Medicaid, like any other payor, may negotiate its own payment rates with hospitals. However, unlike some other payors, Virginia Medicaid is constrained by federal laws and regulations which place certain mandates and restrictions on the reimbursement system.

In addition, the Commonwealth has limited flexibility to implement changes in Medicaid hospital reimbursement prior to FY 1997 under the terms of settlement of a lawsuit filed against the Commonwealth by the Virginia Hospital Association. In keeping with Senate Joint Resolution 180 (1991), the overall cost effectiveness of Medicaid reimbursement is reviewed in Chapters IV through VI of the report.

Managing Increases in Recipients and Utilization of Services. The most direct way to manage the number of program recipients is to restrict program eligibility. As noted earlier, the JLARC interim report, *Review of the Virginia Medicaid Program*, indicated that Virginia's Medicaid eligibility criteria are strict compared to other states, and that Virginia complies with minimum requirements for federal program expansions.

Other options for managing the number of Medicaid recipients include limiting service coverage and imposing recipient co-payments. While these options would not impact Medicaid program eligibility, they could potentially control the number of recipients receiving hospital care by limiting access to services. Chapter VII focuses on the potential cost avoidances and health policy impacts of limiting services and increasing recipients' contributions to their care as a means to control the number of hospital care recipients.

Utilization review is another potentially powerful tool for assuring appropriate utilization of hospital services. While service limitations and co-payments are focused on Medicaid recipients, utilization review is focused on providers in addition to recipients. The purpose of utilization review is to ensure that only approved, medically necessary services are provided to Medicaid recipients. As requested by the study mandate, the DMAS utilization review program for hospital services is also reviewed in Chapter VII.

III. The Cost of Hospital Care

This chapter focuses on increases in the costs that hospitals incur in providing care. These costs include expenditures for labor, medicine, supplies, plant, and other resources. The cost of providing hospital care is an important factor in hospital pricing strategies. Although different payors may negotiate different prices with individual hospitals, increases in the cost of providing care generally lead to price increases for all payors, including Virginia Medicaid. By the same logic, reductions in hospital costs could lead to reductions in the price of hospital services purchased by Virginia Medicaid.

The cost of providing hospital care is of growing concern in Virginia. The average cost of hospital care in Virginia is currently below the national average. However, in recent years Virginia's hospital costs have grown at a faster rate than the national average. If current growth rates continue, the average cost for a day of hospital care in Virginia will exceed the national average by the end of the decade.

Hospital cost increases are driven by a number of factors, including increases in the costs of goods and services hospitals purchase, increases in the amount of patient care services provided, and administrative decisions about the mix of labor and other resources used to furnish care. While hospitals may not have complete control over the costs of purchased goods and services or the complexity of patients they serve, they do have control over such things as overuse of services and inefficient use of labor and facilities. For example, the problem of low occupancy, identified in the 1979 JLARC study *Inpatient Care In Virginia*, continues to be a problem today.

In an attempt to encourage cost containment within the hospital industry, the General Assembly took two actions during the 1992 Session. First, the role of the Health Services Cost Review Council (HSCRC) was strengthened. Second, the General Assembly reaffirmed its intent to use the certificate-of-public-need (COPN) program to regulate the development of new, expensive hospital services and facilities. While the HSCRC and the COPN may encourage hospitals to manage their resources more efficiently, they do not address the full spectrum of factors driving hospital costs.

However, the General Assembly has created an entity which can address these factors. The Joint Commission on Health Care was established during the 1992 Session to study and make recommendations on all areas of health care. The Joint Commission should consider directing a comprehensive study of the factors driving hospital costs in an attempt to identify public policies that may help to contain these costs. The Joint Commission should also facilitate the development of better information on hospital costs and utilization, and continue its efforts to develop a patient level database for Virginia.

TRENDS IN THE COST OF HOSPITAL CARE

There are two primary measures of hospital costs: costs per adjusted patient day and costs per adjusted admission. These measures indicate what it costs a hospital to provide a day of care or an entire admission, adjusted for the amount of outpatient service the hospital provides (see Appendix C for specific definitions of adjusted patient

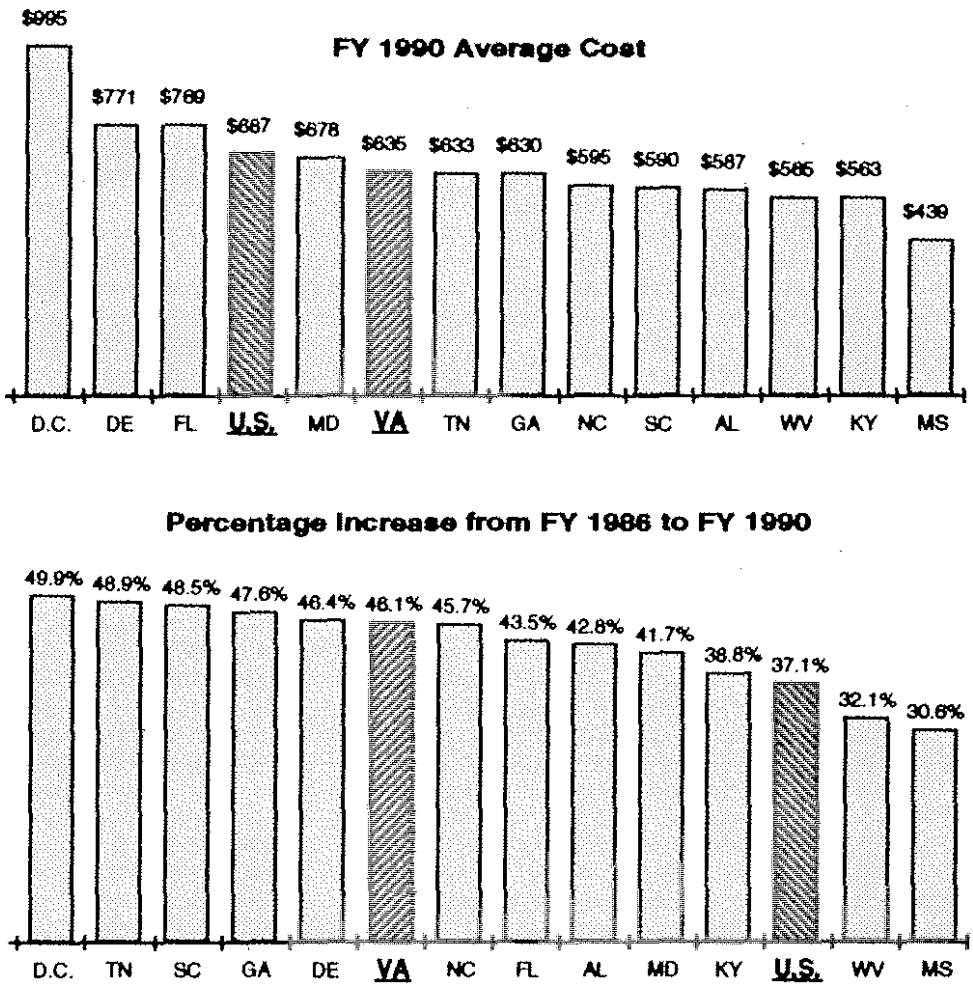
days and adjusted admissions). The measures were used to examine Virginia hospital costs in comparison with other states, as well as to compare costs among Virginia hospitals. In addition, national and State data were analyzed to identify sources of growth in hospital costs.

State Average Costs Are Below the National Average, But Gaining

In fiscal year (FY) 1990, Virginia's average cost per adjusted patient day of $635 was below the national average of $687 (Figure 12). Virginia ranked 28th among the states and the District of Columbia. Virginia ranked fifth among twelve southeastern states and the District of Columbia. The District of Columbia, Delaware, Florida, and Maryland had higher average costs per adjusted patient day.

Figure 12

Average Cost per Adjusted Patient Day U.S., Virginia, and Southeast



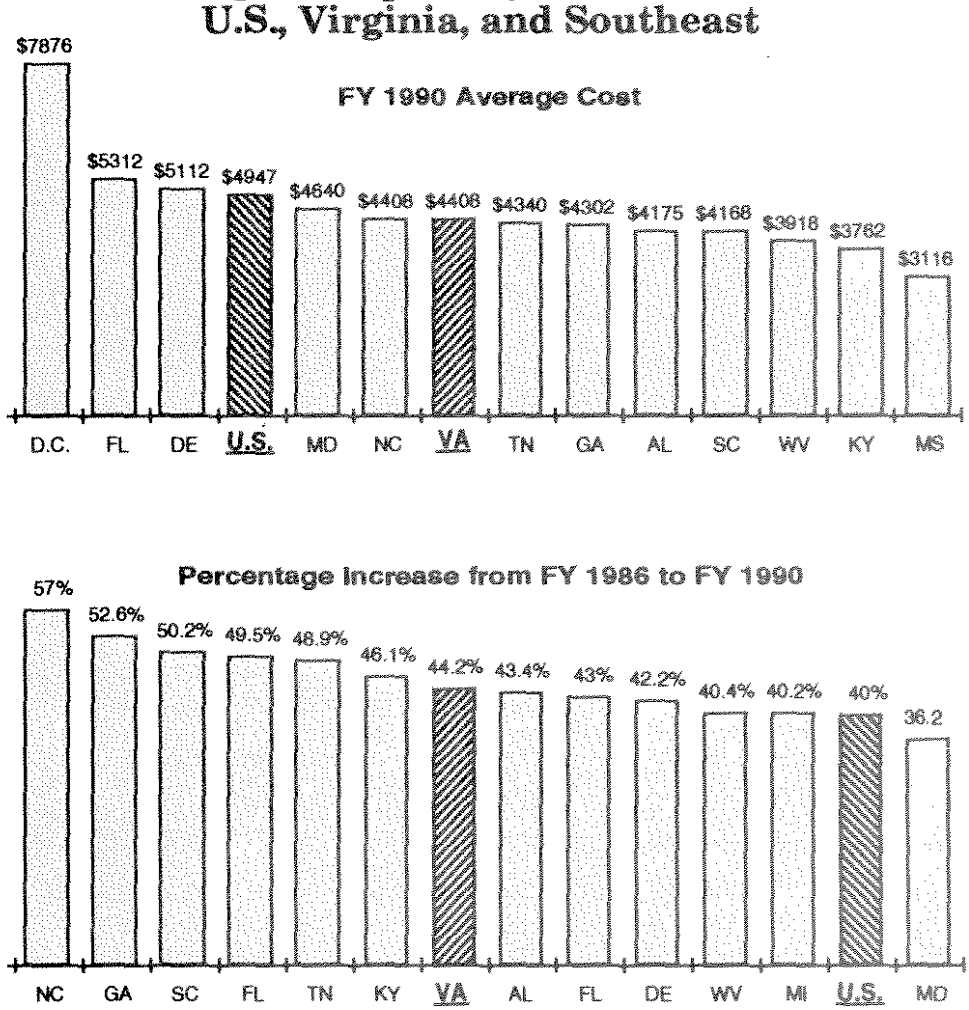
Source: JLARC staff analysis of Virginia Health Services Cost Review Council data.

On the other hand, Virginia's average cost per adjusted patient day has grown at a faster rate than the national average. Virginia's average cost increased by 46.1 percent between FY 1986 and FY 1990, compared to 37.1 percent for the nation. This growth rate ranked sixth behind the District of Columbia, Tennessee, South Carolina, Georgia, and Delaware. The HSCRC projects that if current trends continue, Virginia average costs per adjusted patient day will exceed the national average by the year 2000.

Virginia was also below the national average cost per adjusted admission in FY 1990 (Figure 13). The national average was $4,947, while Virginia's average was $4,408. On this measure, Virginia ranked 32nd among the states and the District of Columbia. In the southeast region, the District of Columbia, Florida, Delaware, and Maryland had higher average costs, and North Carolina's average costs were about equal to Virginia's.

Figure 13

Average Cost per Adjusted Admission
U.S., Virginia, and Southeast



Source: JLARC staff analysis of Virginia Health Services Cost Review Council data.

As was the case with average costs per adjusted patient day, Virginia's average cost per adjusted admission has been growing at a faster rate than the national average. Virginia's average cost increased by more than 44 percent between FY 1986 and FY 1990, compared to a national growth rate of 40 percent. Six of 12 southeastern jurisdictions experienced greater inflation than Virginia during this period. The HSCRC projects that by the end of the decade, Virginia's average cost per adjusted admission will approach, but remain below, the national average.

Variation Exists among Virginia Hospitals

Analysis of costs at individual hospitals within Virginia indicates that wide variation exists (Appendix E). For those individual hospitals for which data were available, the average cost per adjusted patient day was $579 in FY 1990. Average costs for individual hospitals ranged from $175 to $1,232. The average cost per adjusted admission was $3,735, ranging from $1,739 to $9,559.

Average costs tended to vary depending on location and hospital characteristics. Average costs per day and per admission were highest in health service areas (HSAs) II (Northern Virginia) and IV (Richmond and Southside), and lowest in HSA III (Southwest). Average costs at urban hospitals tended to be higher than those for rural hospitals. Average costs at proprietary hospitals tended to be higher than those at non-profit hospitals.

The highest average costs among all hospital groups were for the State teaching hospitals. This finding is not surprising because nationally, major public teaching hospitals tend to be more expensive. Costs are higher in teaching hospitals because they are typically in urban areas, provide a higher complexity of care, and incur additional costs to provide medical education.

The patterns just described are general ones. Wide variations in costs existed among hospitals within the same HSAs, among hospitals of similar size, among hospitals in areas of similar population density, and among non-profit and proprietary hospitals.

Multiple Factors Contribute to Hospital Cost Increases

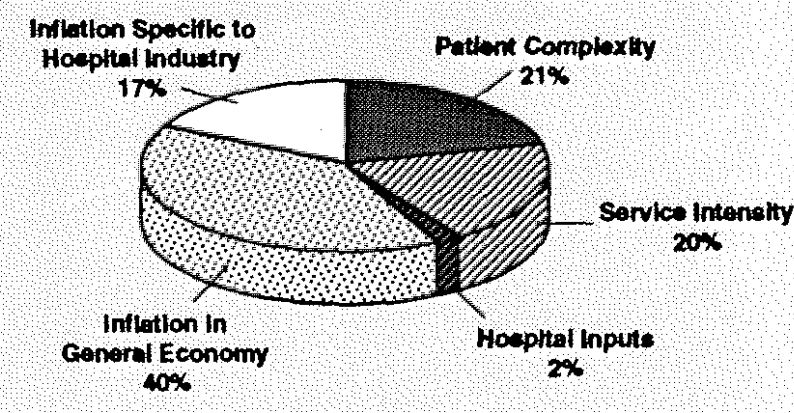
Increases in the cost of actually providing hospital care can be attributed to three general factors: (1) inflation in the costs of goods and services purchased by hospitals, (2) patterns in the types of patient care provided, and (3) management of hospital resources such as labor and plant. It was not possible to analyze the specific impact of these factors on Virginia hospitals due to a lack of comprehensive, reliable data on the types of services provided and the level of productivity in Virginia hospitals.

However, the results of a national study of these factors, conducted by the U.S. Prospective Payment Assessment Commission (ProPAC), can be used for understanding overall cost trends in Virginia. ProPAC's research focused on factors contributing to the rise in the national hospital cost per admission between 1985 and 1989.

Inflation in Goods and Services Purchased Accounted for Much of the Increase. ProPAC found that inflation in the general economy, as measured by the Consumer Price Index, was the largest single contributor to inflation in the costs of goods and services purchased by hospitals (Figure 14). General inflation accounted for about 40 percent of the average cost increase from 1985 to 1989. Inflation specific to the hospital industry accounted for an additional 17 percent of the cost increase from 1985 to 1989.

Figure 14

Estimated Contribution of Various Factors in Increasing Hospital Operating Cost per Admission from 1985 to 1989



Source: Prospective Payment Assessment Commission, *Medicare and the American Health Care System Report to Congress*, June 1991.

ProPAC found that the primary source of inflation was an increase in hospital wages. Hospital wages, particularly wages for registered nurses and hospital administrative staff, increased faster than wages in the general economy.

This trend appears to be present to some degree in Virginia. According to HSCRC data, on average, salary and benefit expenses represented more than 50 percent of hospital expenses in FY 1991. In recent years, hospital salary and benefit expenses in Virginia have been rising at a faster rate than the national average. Because wages tend to be higher in urban areas, it is widely believed that wage differentials contribute to some of the difference in costs between urban and rural hospitals. As shown earlier, hospital costs tend to be higher in the urban areas of the State.

Staff from the site visit hospitals also expressed concern about rising labor costs. For example:

> *One hospital administrator said salary growth is a function of shortages of labor in certain areas. The problem is getting better, but it is still a concern. Nursing salaries can rise 12 to 15 percent in a given year.*

* * *

An administrator at a small community hospital said that the hospital pays the high end of the average staff salary in their area because "you simply have to pay a competitive wage to keep staff." Nurses in small hospitals have to be versatile in a number of areas because they may staff any area of the hospital.

ProPAC identified pharmaceutical costs as another primary reason for increases in the cost of providing hospital care. Nationally, prices for pharmaceuticals rose at more than two times the rate of the CPI between 1985 and 1989. According to HSCRC data, annual hospital spending for pharmaceuticals in Virginia hospitals has increased by more than 55 percent over the past five years. Pharmaceuticals represented three percent of total hospital expenses per day in FY 1991. Pharmaceutical costs were a particular concern among some site visit hospital administrators. For example:

One hospital administrator stated that "pharmacy costs are a major concern — but the increase hasn't been in the item price of particular drugs. Rather, the cost is in the introduction of new drugs. TPA (an antibiotic therapy), for example, can cost as much as $2,500 per dose."

* * *

An administrator at a small rural hospital reported that medication costs rose 11 percent in the last year. The administrator stated that there was also an eight percent increase in the cost of general medical supplies.

ProPAC found that hospitals have limited control over increases in wages and pharmaceuticals. While it is logical to assume that much of the increase in Virginia hospital wages has been beyond the control of individual hospitals, part of the increase could also be due to overcompensation. Similarly, the extent to which growth in pharmaceutical costs could be due to overutilization or inefficient management decisions has not been determined. JLARC staff did not conduct analysis to determine whether all of the growth in wages and pharmaceutical costs was in fact beyond the control of hospitals.

The Complexity and Intensity of Patient Care Has Also Had an Effect. ProPAC estimated that nationally, changes in the complexity of patient care accounted for about 21 percent of the increase in costs between 1985 and 1989. During the 1980s, as more patients were treated for routine ailments in outpatient settings, the complexity and severity of illness for those patients remaining in hospitals increased. At the same time, technological advances in such areas as transplantation, cardiac care, and cancer therapy, as well as the demand for AIDS treatment, have produced treatments which are more complex and costly. ProPAC concluded that the additional costs associated with greater case complexity were generally beyond the control of hospitals.

It appears that Virginia has been affected by this pattern of increasing patient complexity, at least for Medicare patients. The Medicare case mix index (CMI) is a measure of the amount of resources required to treat a given patient relative to all other Medicare patients. Virginia's median CMI has increased steadily since FY 1986. This trend indicates that Virginia's hospitals are having to expend more resources to treat Medicare patients. This is a significant development because Medicare is a major payor at many Virginia hospitals. As stated earlier, because DMAS does not utilize a case mix index for Virginia Medicaid patients, JLARC staff could not conclusively determine whether Medicaid patients are requiring more complex treatments.

ProPAC also found that in addition to treating more severely ill patients, hospitals have also increased the intensity of services provided to each patient. ProPAC estimated that changes in intensity accounted for about 20 percent of the increase in hospital costs between 1985 and 1989. Greater intensity has been attributable to the development of new technologies as well as the more frequent use of established tests and procedures.

In some cases, the intensity of services goes beyond what is medically necessary. ProPAC identified service intensity as one of the major areas where significant reductions in costs may be found, citing evidence that many tests and procedures are unnecessary or of limited value.

This finding is supported by other experts as well. A recent national study by the Rand Corporation estimated that 22 percent of hospital admissions during the mid-1980s were inappropriate. Other studies have shown that approximately ten percent of all hospital admissions may be inappropriate. Treatments which may be particularly overused include caesarean sections, hysterectomies, certain back surgeries, magnetic resonance imaging (MRI), prostate surgery, and the use of certain drugs to eliminate blood clots.

Historically, the primary strategy for controlling overutilization has been utilization review. Virginia Medicaid employs an extensive utilization review program which is designed to ensure that services are provided in keeping with industry norms. This program has allowed the State to avoid paying for substantial amounts of unnecessary services. However, the issue of service intensity raises the question of whether normal practice patterns are appropriate in all cases and whether high quality outcomes may be achieved with fewer tests or less expensive procedures. Practice patterns are determined by both hospitals and physicians, which means that both types of providers are responsible for reducing unnecessary utilization.

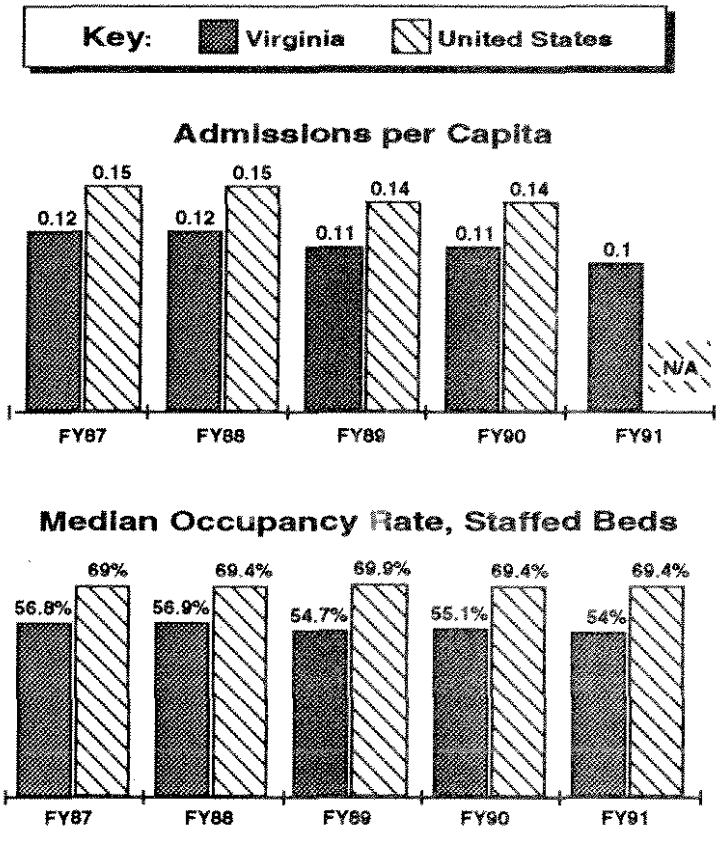
The extent to which overutilization drives hospital costs in Virginia has not been documented. Based on the ProPAC analysis, and assuming that the practices of Virginia providers mirror national norms, it appears that some overutilization has probably occurred in Virginia. An examination of the impact of overutilization in Virginia would require extensive patient level data which could be analyzed to determine the most cost-effective modes of care for various ailments. The State does not currently have the capability to conduct this type of analysis on a statewide basis.

Management of Hospital Resources Accounts for Some Cost Increases. ProPAC found that hospital resources accounted for an additional two percent of cost increases between 1985 and 1989. Hospital resources include such factors as the size and skill mix of the labor force, the productivity of the labor force, and the use of non-labor resources such as facilities and equipment to furnish care. According to ProPAC, upgrades in the skill mix of employees (for instance, more registered nurses and fewer licensed practical nurses) and the use of non-labor inputs contributed about nine percent to the increase in costs. These increases were offset in part by an increase in labor productivity.

One indicator of hospital decision making in Virginia is management of occupancy. As explained in Chapter I, low occupancy was identified as an important factor in hospital cost inflation in the 1979 JLARC report *Inpatient Care In Virginia.* Low occupancy continues to be a problem today. According to the HSCRC, the number of admissions in Virginia declined from .12 admissions per capita in FY 1987 to .10 admissions per capita in FY 91 (Figure 15). Over this same period, the statewide median occupancy rate declined from 56.8 percent to 54 percent. Virginia's median occupancy rate was below the national median of greater than 69 percent occupancy in each year

Figure 15

Admissions and Occupancy: Virginia and U.S., FY 1987 - FY 1991



Source: JLARC staff analysis of Virginia Health Services Cost Review Council data.

between FY 1987 and FY 1991. (Occupancy rates for individual hospitals are listed in Appendix D.)

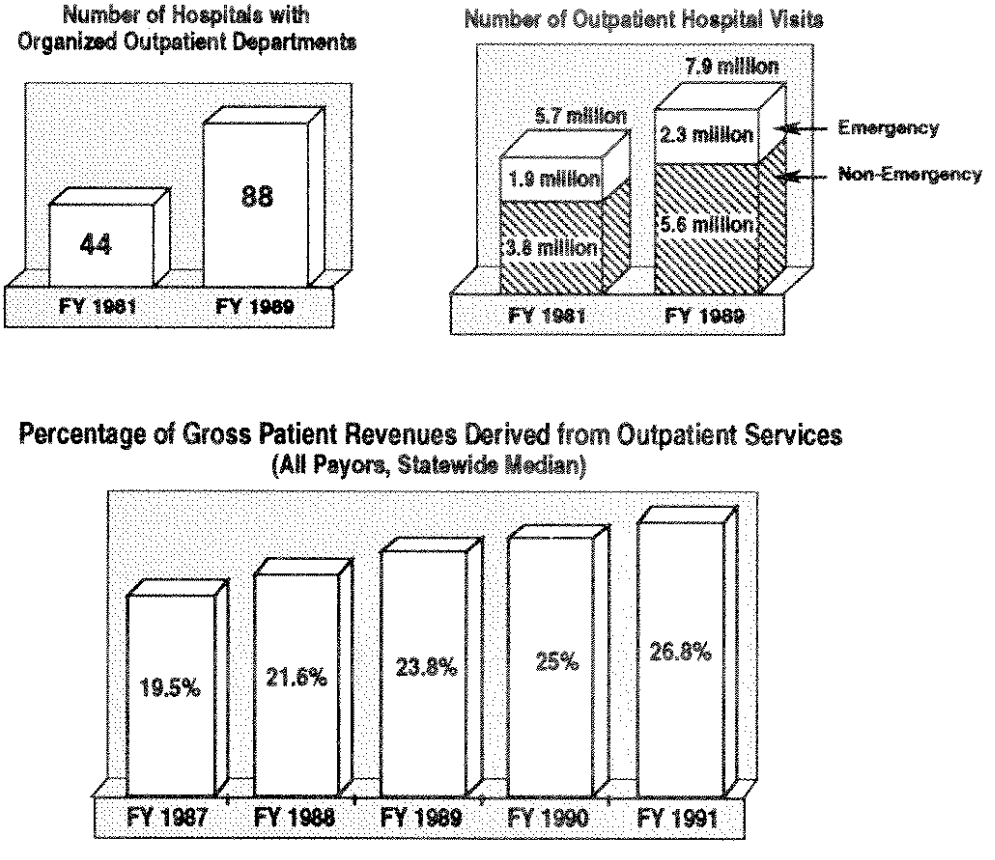
Virginia's hospitals have reacted to declining occupancy by staffing fewer beds. Staff from several site visit hospitals said that in addition to staffing fewer beds, managing the skill mix of staff has become an important strategy for reacting to low occupancy. For example, one site visit hospital administrator noted:

> *In 1987, the hospital spent 18.5 nursing hours per day on a patient. This care was provided primarily by aides. At the time, the national average for nursing hours per day was six. In 1992, the hospital reported that it was spending eight nursing hours per patient day. This has been accomplished through attrition and a higher skill mix.*

The decline in occupancy has been partially offset by an increase in outpatient utilization (Figure 16). According to data published by the American Hospital Associa-

Figure 16

Indicators of Outpatient Hospital Utilization in Virginia's Short-Term, Non-Federal Hospitals, FY 1981 and FY 1989



Source: JLARC staff analysis of Virginia Health Services Cost Review Council data.

tion, the number of Virginia hospitals with organized outpatient departments increased from 44 in 1981 to 88 in 1989. Non-emergency outpatient visits increased by 43 percent, from 3.8 million visits in 1981 to 5.6 million visits in 1989. As a result, Virginia hospitals relied on outpatient services for 27 percent of their gross patient revenues in FY 1991, according to the Health Services Cost Review Council.

Despite the implementation of new staffing strategies and the increase in outpatient utilization, excess bed capacity remains a problem in Virginia hospitals. At the very least, the overhead cost of maintaining unused space must be paid by health care purchasers. Furthermore, as pointed out by the Health Services Cost Review Council in its 1992 annual report, the low occupancy levels relative to the nation indicate that Virginia's hospitals may be staffing at levels higher than patient volume requires.

STATE MECHANISMS FOR HOSPITAL COST CONTAINMENT

The Commonwealth now has three major mechanisms for promoting hospital cost containment. The HSCRC, through its global screen, is the State's primary mechanism for promoting overall cost efficiency. The certificate-of-public-need program is the State's primary mechanism for regulating hospital capital expenditures. The Joint Commission on Health Care is charged with promoting cost effectiveness in the delivery of all health care. The creation of the Joint Commission provides the General Assembly with a new opportunity to address the problem of hospital cost inflation.

Role of the Health Services Cost Review Council Has Been Expanded

The Health Services Cost Review Council was established by the General Assembly in 1978 to promote cost containment within Virginia's health care institutions by collecting, analyzing, and disseminating information to the public. One of the major responsibilities of the HSCRC is to evaluate the reasonableness of annual increases in hospital costs. This is attempted with an evaluation protocol called the global screen. The global screen is used to determine whether or not a hospital's budgeted and historical total operating expenses are "reasonable." If a hospital fails the global screen, then the HSCRC recommends, but has no power to enforce, budget reductions.

The criterion of reasonableness used by the HSCRC is the national average increase in the cost per adjusted admission. Each hospital's rate of increase in cost per adjusted admission over a two-year period is compared to the national average rate of increase for the same period. If the hospital's rate of increase is less than the national average for the period, then the hospital passes the global screen.

A number of hospitals have failed the global screen in recent years. Out of 93 reporting hospitals (or hospital systems), 60 failed the FY 1991 global screen for actual expenses. In FY 1990, 58 out of 92 reporting hospitals failed the global screen. Thus, more then 60 percent of Virginia hospitals have failed to keep their annual expense increases below the HSCRC standard.

The HSCRC also reviews departmental expense increases for individual hospitals. In FY 1991, 57 of 93 reporting institutions had expenses which exceeded the HSCRC's cost standards by a total of $84.4 million.

These performance data indicate that numerous hospitals have not followed the cost containment guidance of the HSCRC. During the 1992 Session, the General Assembly strengthened the role of the HSCRC. Senate Bill 518 revised the focus of the HSCRC from rate review to determination of the efficiency and effectiveness of health care providers. Among a number of provisions, the General Assembly directed the HSCRC to:

- promulgate regulations establishing a methodology for the review and measurement of the efficiency and productivity of health care institutions by January 1, 1993;

- submit a preliminary report on the effectiveness of the efficiency and productivity measurements in controlling health care costs by December 1, 1993. A final report is to be submitted by October 1, 1994; and

- include in the final report a plan to implement a mandatory rate-setting mechanism if it is determined that the efficiency and productivity measurements are not effective in controlling health care costs.

In addition, through Senate Joint Resolution (SJR) 118, the General Assembly decided to recognize the most efficient providers in the Commonwealth. SJR 118 directed the HSCRC to develop and adopt a methodology which identifies the most efficient providers of high quality health care in the Commonwealth.

The revised HSCRC methodology may encourage hospitals to manage their resources more efficiently. However, as noted earlier, some cost factors such as wage rates and pharmaceutical costs are only partly within the control of hospitals. To the extent that the cost of health professionals and pharmaceuticals continue to rise, hospital expenses will continue to increase.

Certificate-of-Public-Need Program Has Been Reaffirmed

The State's certificate-of-public-need program has been operational in various forms since 1973. The purpose of the COPN program is to:

> ...encourage, foster, and promote the planned and coordinated development of necessary and adequate health, surgical, and medical care facilities and that such comprehensive health planning and development shall be in a manner which is coordinated, orderly, timely, economical and without unnecessary duplication of services and facilities.

The COPN program has come under scrutiny in recent years. In 1986 Governor Baliles appointed a commission to study the effectiveness of COPN. The commission included representatives from the Virginia House of Delegates, the Senate, and the public-at-large. The commission proposed that the COPN review requirements for general hospitals be removed, on the premise that competition would be more effective than COPN regulation for encouraging hospitals to contain costs. However, a 1990 study conducted by the Secretary of Health and Human Services reached the opposite conclusion.

During the FY 1992 Session, the General Assembly reaffirmed its intent for general hospitals to be regulated under COPN. The General Assembly required the regulation of capital expenditures of $1 million or more. In addition, the General Assembly added specific provisions for the regulation of the introduction or replacement of certain high technology services, including: cardiac catheterization, computed axial tomography (CAT) scans, gamma knife surgery, lithotripsy, magnetic resonance imaging (MRI), magnetic source imaging (MSI), neonatal special care, open heart surgery, and other services.

If the strengthened COPN program fulfills its intended purpose, then costly capital expansions will only be undertaken when there is a clear public need. However, as was pointed out in the 1979 JLARC report *Inpatient Care In Virginia*, the COPN program has no impact on the excess bed capacity which already exists in the State.

The Joint Commission on Health Care Could Aid Cost Control Efforts

The Joint Commission on Health Care was established during the 1992 Session as a legislative agency. The purpose of the Joint Commission is to:

- study, report and make recommendations on all areas of health care provision, regulation, insurance, liability, licensing, and delivery of services;

- ensure that the Commonwealth as provider and regulator adopts the most cost-effective and efficacious means of delivery of health care services so that the greatest number of Virginians receive quality health care; and

- encourage the development of uniform policies and services to ensure the availability of quality, affordable, and accessible health services and provide a forum for continuing the review and study of programs and services.

The Joint Commission has mapped out a broad agenda. During 1992, the Joint Commission has plans to address issues related to:

- statewide health reform,
- CHAMPUS,
- hospital issues,
- Health Services Cost Review Council,

- State administration of health care,
- provider taxes,
- health manpower,
- local health issues,
- long-term care,
- Medicaid reform,
- Certificate of Public Need, and
- role of business and other payors in the health care system.

While the Joint Commission will study other issues as well, this listing indicates its wide-ranging purview.

By virtue of its broad mandate, the Joint Commission on Health Care provides the General Assembly with the opportunity to address hospital cost inflation and Medicaid reform in a comprehensive fashion. The Joint Commission has already expressed its interest in Medicaid reform. Therefore, specific recommendations for the Joint Commission are made throughout this report.

The Joint Commission is also an appropriate body for developing new State initiatives to control hospital costs. As noted in an earlier discussion, neither hospitals, the Medicaid program, the HSCRC, nor the COPN program by themselves have the capability to address the full spectrum of factors which drive hospital costs. The Joint Commission could attempt to bring all of these resources together to identify and address the issues in a comprehensive fashion.

Recommendation (1). **In the interest of reducing the price of hospital care for all purchasers including Virginia Medicaid, the Joint Commission on Health Care may wish to direct a study to identify the full range of factors driving hospital costs in Virginia, and consider public policies which might help to control these factors. Specifically, the Joint Commission may wish to: (1) consider State policies which might help to control inflation in the cost of hospital labor and pharmaceuticals; (2) consider State policies for addressing the problem of excess hospital capacity; (3) examine the extent to which overutilization of services may be contributing to hospital cost inflation in Virginia, and consider State policies for addressing this problem; and (4) examine other factors which contribute to hospital cost inflation in the Commonwealth.**

Comprehensive, Reliable Data Are Needed

If the Joint Commission decides to address the problem of hospital cost inflation, it will need comprehensive, reliable data on hospital costs and utilization in order to develop appropriate cost containment policies. During the course of this study, three critical needs were identified. First, there is a need for better coordination between the State agencies which collect hospital data. Second, there is a need to develop better information on the cost and utilization of hospital outpatient services. Finally, there is

a need to develop a capacity to examine the extent to which overutilization of services drives hospital costs in Virginia.

Coordination Between Agencies Should Be Improved. As noted earlier, the State's primary source of hospital cost information is the HSCRC. The primary source of data on hospital utilization is the Center for Health Statistics at the Department of Health (DOH). Both agencies provided valuable information for this study.

However, there is a need for better integration between these two sources of data. For example:

- The HSCRC and DOH use different definitions to classify hospitals. As a result, it is difficult to compare hospital costs and utilization for categories of hospitals.

- The HSCRC treats hospital systems as single entities, while DOH treats system-affiliated hospitals on an individual basis. This makes it difficult to relate financial data to utilization data for hospitals which are part of systems.

- The HSCRC reports hospital occupancy data on the basis of staffed beds, while the Department of Health reports hospital occupancy data on the basis of licensed beds. Because of problems noted above, it is difficult to relate hospital costs and charges to utilization of licensed beds.

Recommendation (2). **The Joint Commission on Health Care may wish to consider establishing a technical advisory group on hospital data collection. The technical advisory group should be comprised of representatives from the Health Services Cost Review Council, the Department of Health, the Department of Medical Assistance Services, and Virginia's hospital industry. The advisory group should evaluate all of the hospital-related reporting methods for the Health Services Cost Review Council and the Department of Health. The objective of this review should be to develop reporting formats which are mutually consistent, and which allow accurate analysis of both costs and utilization for each individual hospital in the State.**

Outpatient Information Should Be Improved. As outpatient services become a greater source of hospital revenues, there is also a need for more comprehensive reporting on outpatient costs, revenues, and utilization. Currently, there is no central source of information on outpatient hospital costs. The existing data on hospital costs per adjusted patient day and per adjusted admission are essentially inpatient costs adjusted to account for the amount of total hospital revenues derived from outpatient services. These measures do not provide a clear understanding of the costs actually incurred to provide outpatient services.

Similarly, there is no central source of information on net revenues from outpatient services. The Health Services Cost Review Council, beginning with its 1992 annual report, reports the amount of gross patient revenues derived from outpatient services for each hospital. However, gross patient revenues do not reflect the actual amounts paid for outpatient services. Thus, it is difficult to develop a clear understanding of the amount of money hospitals actually receive for their outpatient services.

Also, there is no central source of information on the volume of outpatient services. The HSCRC reports useful information on the utilization of inpatient services by payor. However, neither the HSCRC nor DOH collects information on the number of outpatient visits or procedures provided by hospitals. Information on outpatient utilization by payor would be helpful in evaluating the relative importance of Medicaid and other payors to individual hospitals.

Recommendation (3). **The technical advisory group on hospital data collection should develop a methodology to collect and report hospital-level information on: (1) the cost of providing outpatient services, (2) net patient revenues derived from outpatient services, and (3) utilization of outpatient services by payor.**

Overutilization Should Be Examined. Overutilization of services has been identified as an important factor in hospital cost inflation at the national level, and as an area in which significant cost avoidances might be found. These findings are based on expert analysis of services and outcomes for individual patients. By evaluating the services provided to individual patients for various medical problems, it is possible to determine which physicians and hospitals tend to use more resources than are typically necessary to produce a positive outcome.

In a 1992 report on the possible establishment of a patient level database (Senate Document No. 10), the Health Services Cost Review Council and the Health Planning Board concluded that analysis of provider practice patterns can be a component of a system-wide cost containment strategy. The report provided two examples to illustrate the use of patient level data to promote cost containment:

> ...the Maine Medical Assessment Foundation and the Maine Medical Association used a patient level database to develop information about hysterectomy rates in the state. After this information was given to individual physicians, the number of hysterectomies declined without measurable adverse health effects. Admission rates for back surgery and pediatric medical admissions also showed similar declines.
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> * * *
>
> A study reported in the *New England Journal of Medicine* evaluated the differences in hospital usage rates between Boston, Massachusetts, and New Haven, Connecticut. It was found that Bostonians used 4.5 hospital beds per 1,000 population, as compared to fewer than three

beds per 1,000 in New Haven. Most of the differences in usage rates occurred in the care of patients with medical conditions for which there is high variation in medical practice patterns. These findings have helped lead to an examination of practice patterns and refinement of treatment protocols.

Patient-level data on provider practice patterns in Virginia could help to identify those hospitals and physicians for which overutilization may be a problem. Once identified, hospitals and physicians which routinely use more resources than necessary to achieve high-quality outcomes could be educated about the need to reduce resource costs. Also, the Department of Medical Assistance Services could use information on provider practices to negotiate appropriate payment rates for Virginia Medicaid. The Joint Commission has established the groundwork for improving Virginia's capacity to measure patient-level outcomes by expressing its support for the development of a patient-level database.

Recommendation (4). **The Joint Commission on Health Care may wish to: (1) continue to promote the development of a patient-level database for Virginia, and (2) ensure that the database is designed to allow analysis of hospital and physician practice patterns so that this information may be used to educate providers and to aid the Department of Medical Assistance Services when it negotiates Medicaid reimbursement rates with providers.**

IV. Inpatient Hospital Reimbursement

Senate Joint Resolution (SJR) 180 (1991) required JLARC to study Medicaid reimbursement methods to determine if they adequately encourage cost-effective delivery of services, as well as to assess the sufficiency of the reimbursement rates to provide quality care at the lowest required costs. In addition, the study mandate directed JLARC to examine the State's interpretation of federal requirements, and to explore alternative administrative methods for implementation of program requirements and options. This chapter assesses the hospital inpatient reimbursement system in accordance with these requirements.

Prior to 1982, the State reimbursed hospitals for Medicaid services on a cost basis. In 1979 JLARC recommended that Virginia Medicaid adopt a prospective payment system for inpatient hospital reimbursement. It was hoped that a prospective reimbursement system would provide the State with a better means to contain inpatient hospital costs. Since 1982, Virginia has used a prospective payment system to reimburse hospitals.

Analysis of the inpatient reimbursement system indicates that it has generally encouraged cost-effective delivery of services. However, there are some concerns with particular components of the reimbursement system which may hinder its cost effectiveness.

Also, Medicaid clients have access to all of Virginia's acute care hospitals. However, providers have been dissatisfied with inpatient reimbursement rates. In fiscal year (FY) 1986, the Virginia Hospital Association (VHA) sued the State claiming that inpatient reimbursement rates were insufficient to meet minimum federal requirements.

The lawsuit was settled in February 1991, with an agreement enjoining the VHA and the State to abide by certain terms through the end of June 1996. As part of that agreement, the State agreed to pay additional reimbursement to the hospitals from FY 1993 through the end of FY 1996. Furthermore, the settlement agreement restricts the State's ability to change the reimbursement system prior to FY 1997. The State and the VHA also agreed to establish a joint task force in January 1995 to evaluate the inpatient reimbursement system (hereafter called the task force on inpatient reimbursement).

The General Assembly should consider four issues related to the future of the inpatient reimbursement system. First, there is a need to improve the State's ability to evaluate hospital efficiency in anticipation of future legal challenges. Second, there is a need to decide between minimizing Medicaid outlays versus maximizing the use of federal dollars to support the State teaching hospitals. Third, there is a need to decide between minimizing Medicaid spending versus maintaining a more generous payment

policy than is federally required for hospitals with high Medicaid caseloads. Finally, the General Assembly could decide to make special provisions to support certain rural hospitals through Medicaid reimbursement.

Considering the importance of these four issues, the General Assembly should take an active role in setting Medicaid policy for the future. The inpatient reimbursement system should then be designed to reflect the policy goals of the General Assembly.

OVERVIEW OF THE INPATIENT REIMBURSEMENT SYSTEM

The reimbursement system, which has been in place since 1982, pays hospitals for Medicaid inpatient services on a prospective basis. The State's flexibility to make changes to the reimbursement system is limited by federal regulations and the hospital settlement agreement.

Reimbursement System Design

The General Assembly took initiative to change to a prospective reimbursement system through 1982 Appropriation Act language stating:

> The Governor in conjunction with the State Board of Health shall initiate changes...which provide for development and implementation by July 1, 1982, of revised reimbursement systems for hospitals and nursing homes. Such systems shall be consistent with federal law and be based upon rates which are reasonable and adequate to meet costs of efficient and economically operated facilities.

To develop and implement the new system, a task force was appointed by the Governor, and a national consultant was hired to provide technical assistance.

The system which was developed, and which has been in place since that time, utilizes six basic conceptual components:

- hospitals are categorized into peer groups with established payment limits or "ceilings" for operating costs,
- an inflation factor is used to update peer group ceilings each year,
- hospitals are paid a prospective per diem rate for their Medicaid operating costs,
- hospitals may receive an efficiency incentive if their operating costs are below the peer group ceiling,

- hospitals which carry a large Medicaid patient load are given additional payments called "disproportionate share adjustments," and

- payment for capital costs and medical education costs are calculated on a reasonable cost or "pass-through" basis.

The vast majority of inpatient payments are for operating costs. Payments for capital costs, direct medical education, and disproportionate share adjustments make up the remainder of expenditures. An example of how the prospective per diem rate is determined is provided in Exhibit 1.

Exhibit 1

Summary of How the Prospective Per Diem Rate is Determined

To determine a hospital's prospective operating per diem rate, the following steps are taken:

1. The hospital reports its annual operating costs to the Department of Medical Assistance Services (DMAS). DMAS determines reimbursable costs, and converts these costs to a per diem by calculating the average cost per patient day.

2. The hospital peer group ceiling is calculated by inflating the previous year's ceiling rate with the inflation factor update.

3. The hospital's reported per diem costs, charges, and the ceiling are compared. The lower value is chosen as the prospective per diem reimbursement rate for operating costs.

4. Added to the per diem reimbursement rate are disproportionate share adjustments and the pass-through components of capital, education, and efficiency incentives.

Source: JLARC staff analysis.

Peer Groups and Ceiling Levels. Virginia Medicaid utilizes a peer grouping system which is intended to group hospitals with similar cost factors. To operationalize this process in 1982, hospitals were classified into seven different peer groups, using two criteria — location and size. First, they were classified as either an urban or rural hospital based on standard metropolitan statistical area (SMSA) data published by the federal Office of Management and Budget. Then, hospitals were sub-divided by their number of licensed beds to produce the following peer groups:

Urban	Rural
1. 0-100 beds	5. 0-100 beds
2. 101-400 beds	6. 101-170 beds
3. 401-600 beds	7. 170+ beds
4. 600+ beds	

The criteria, including the category ranges for bed size, were modeled after Medicare's reimbursement system. Since 1982, DMAS has made one change to the peer grouping criteria. In 1988, in accordance with legislative intent, the State teaching hospitals — the University of Virginia Medical Center (UVAMC) and the Medical College of Virginia Hospitals (MCVH) — were separated into an eighth peer group.

Prospective reimbursement ceilings on reported allowable costs were established for each peer group as of July 1, 1982. These ceilings were calculated using reported allowable costs data for all hospitals from calendar year 1981. Individual hospital operating costs were advanced by a reimbursement escalator from the hospital's fiscal year end to July 1, 1982. After this advancement, the operating costs were standardized using SMSA wage indices, and a median per diem cost was determined for each peer group. These medians were readjusted by the wage index to set an actual cost ceiling for each SMSA.

As a result of these calculations, there is one ceiling for each rural peer group, but multiple ceilings for the urban peer groups (one for each SMSA represented within each peer group.) A similar process was used to establish separate ceiling rates for neonatal intensive care units in 1986 in order to establish more appropriate rates for these high-cost units.

The intent of payment ceilings was to encourage hospital cost containment by limiting hospital payment to the median reported allowable cost per day within each peer group. Conceptually, those hospitals with higher than the median reported costs would be financially penalized by exceeding the ceiling level payment. Those hospitals with reported costs below the ceiling would be financially rewarded by receiving an efficiency incentive for payment below their ceiling (discussed in a following section). Therefore, an "efficient" hospital was operationally defined as any hospital operating at or below its peer group ceiling.

Inflation Factors Used to Update Yearly Ceiling Level Payments. Since base ceiling rates were set in 1982, an inflation factor has been used each year to update ceiling payment rates. Over the years, DMAS has used four different inflation factors to inflate inpatient hospital reimbursement ceilings (Table 1).

The Consumer Price Index (CPI) less shelter is the CPI minus its housing and interest components. The medical care component of the CPI (MCPI) is a measure of medical care price changes based upon specific indicators of hospital, medical, dental, and drug prices.

Table 1

Inflation Factors Used by DMAS

Fiscal Years	Inflation Factor
1983-1985	Consumer Price Index less shelter
1986-1987	Medical care component of the Consumer Price Index
1988	U.S. Health Care Financing Administration Market Basket Index
1989-present	Virginia-specific Market Basket Index

Source: JLARC staff analysis of DMAS data.

The U.S. Health Care Financing Administration Market Basket Index is developed by Data Resources Incorporated and is commonly called the "DRI." The DRI measures the average annual change in the prices of goods and services U.S. hospitals purchase for inpatient care. The DRI is used for determining Medicare reimbursement levels, and is widely used by states for determining Medicaid reimbursement levels.

The Virginia-specific Market Basket Index is developed by Data Resources Incorporated for the State of Virginia. Referred to as the "DRI-VA," it is a measure of the costs for goods and services purchased by Virginia hospitals, and takes into account Virginia-specific data such as salaries.

Per Diem Payment. Hospitals are reimbursed for their Medicaid operating costs according to a prospective per diem rate. This prospective rate is based on the lower of: (1) the previous year's reported allowable per diem operating cost plus the inflation factor; (2) the appropriate ceiling; or (3) hospital charges.

The reported allowable per diem operating cost is derived from Medicaid cost reports filed with DMAS by the hospitals. The cost reports consist of schedules calculating Medicaid allowable operating costs. DMAS defines Medicaid allowable costs to be Medicare allowable costs, with a few minor exceptions.

Using the cost reports, DMAS aggregates the reported allowable operating costs for each hospital. These costs are divided by the number of Medicaid patient days to produce the allowable per diem cost.

Efficiency Incentives. If a hospital's charges or reported allowable operating costs are below the ceiling level payment, then the hospital will receive an efficiency incentive payment. This payment is calculated on a sliding scale which allows hospitals to receive up to 25 percent of the difference between reported costs and ceiling payment.

Disproportionate Share Adjustments. Federal law enacted in 1981 required that state Medicaid agencies take into account the situation of hospitals serving a disproportionate number of Medicaid or low-income patients. However, the method by which this federal requirement was to be operationalized was left to be determined by the individual states. In 1982, Virginia chose to enact a payment policy which allowed hospitals with Medicaid utilization above eight percent to be paid a disproportionate share adjustment (DSA).

By 1986, Congress had determined that few states had implemented disproportionate share payment policies. Therefore, through the 1987 Omnibus Budget Reconciliation Act (OBRA 87) Congress required states to make disproportionate share payments to hospitals which have: (1) a Medicaid utilization rate greater than one standard deviation above the mean for all participating hospitals in the State, or (2) a low-income utilization rate in excess of 25 percent.

However, OBRA 87 did allow for states to define DSA qualification at lower rates of Medicaid or low-income utilization. After the enactment of OBRA 87, Virginia chose to continue its DSA criterion at eight percent Medicaid utilization, instead of the minimum federal criteria of one standard deviation above the mean (which would have been 16.25 percent Medicaid utilization in 1988).

Recently, DMAS has further defined DSA-eligible hospitals as being either Type One or Type Two. Type One hospitals consist of the two State teaching hospitals, and Type Two consist of all other hospitals. For Type One hospitals, the DSA is equal to the hospital's Medicaid utilization in excess of eight percent, times 11, multiplied by the lower of the prospective operating cost rate or ceiling. For Type Two hospitals, the DSA is equal to the product of the hospital Medicaid utilization over eight percent times the lower of the prospective operating cost rate or ceiling. Once the DSA is calculated it is added to the per diem operating rate.

The State teaching hospitals are treated differently than the other hospitals in order to facilitate the shifting of funds enacted in the 1992 Appropriation Act. The Appropriation Act reduced the general fund appropriations to the two State teaching hospitals by $40.8 million for FY 1992. These reductions were replaced by an equal increase in non-general fund appropriations reflecting enhanced Medicaid reimbursement to the institutions. This action allowed the Commonwealth to replace roughly half of the $40.8 million with federal funds. The enhanced Medicaid payments were accomplished by increasing the DSA multiplier by a factor of 11.

This policy will also be in place for the 1992-1994 biennium. As planned, non-general fund appropriations to the two State teaching hospitals were increased by $64.5 million in each year of the biennium, while general fund appropriations were reduced accordingly.

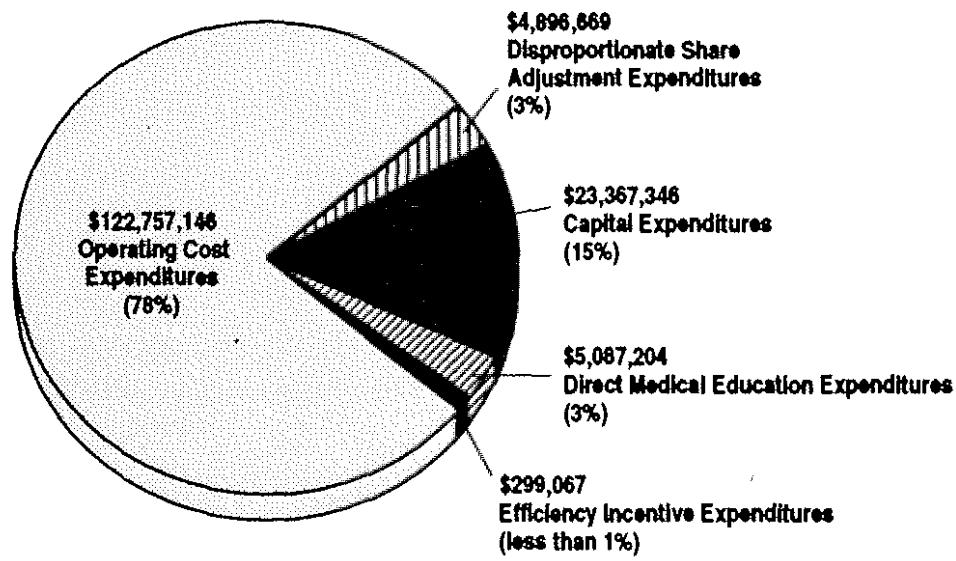
Capital Payments and Direct Medical Education Payments. Capital costs are reported separately on each hospital's cost report and are reimbursed at 100 percent of reported allowable costs. They are calculated into a per diem format, and added to the overall prospective per diem rate.

Direct medical education costs are also reported separately on the annual cost reports of hospitals with certified medical education programs, and are reimbursed at 100 percent of reported costs. They are calculated into a per diem format, and added to the prospective per diem rate.

Spending by Category. The majority of Medicaid inpatient reimbursement expenditures are for operating costs, which were an estimated 78 percent of the total in FY 1990. Other reimbursement expenditures are for capital costs, which were an estimated 15 percent in FY 1990; disproportionate share adjustments, at about three percent; direct medical education costs, also approximately three percent; and efficiency incentives, which were less than one percent (Figure 17).

Figure 17

Estimated Proportion of Medicaid Reimbursement Expenditures by Component, BY 1990



Source: JLARC staff analysis of DMAS hospital payment data. Includes in-State acute care hospitals only, and is compiled according to hospital fiscal year.

Federal Requirements for Inpatient Reimbursement

In addition to the DSA requirements, there are other key federal requirements guiding Medicaid inpatient reimbursement:

- The payment rates must be adequate to ensure that recipients have reasonable access to inpatient hospital services of adequate quality, taking into account geographic location and reasonable travel time.

- The State must ensure that the payment rate for inpatient hospital services will be no more in the aggregate than the amount the agency reasonably estimates would be paid for the service under the Medicare principles of reimbursement.

- Each participating provider must file uniform cost reports.

- The Medicaid agency must provide for periodic audits of the financial and statistical records of participating providers.

- The Medicaid agency must provide an appeals or exception procedure that allows individual providers an opportunity to submit additional evidence and receive prompt administrative review with respect to such issues as the agency determines appropriate.

- The methods and standards used to determine payment rates must provide that reimbursement for hospital patients receiving services at an inappropriate level of care will be made at lower rates, reflecting the level of care actually received in a manner consistent with section 1861 (V) (1) (G) of the Social Security Act.

In addition, perhaps what has become the most critical requirement for a state to meet is the Boren Amendment, which became federal law in 1981. Prior to 1982, states were required to use cost-based reimbursement unless special waivers were approved. However, to encourage Medicaid cost containment, Congress relaxed such requirements to grant states greater flexibility for determining Medicaid reimbursement. This statute, called the Boren Amendment, also requires states to:

> ...make assurances to the United States Department of Health and Human Services that Medicaid payment rates for hospitals are reasonable and adequate to meet the costs which must be incurred by efficiently and economically operated facilities in order to provide care and services in conformity with applicable State and Federal laws, regulations, and quality and safety standards, and to assure that individuals eligible for medical assistance have reasonable access to inpatient hospital services of adequate quality.

The Boren Amendment has become a critical issue because as of March 1992, provider associations (includes hospitals and nursing homes) in 22 states have challenged Medicaid reimbursement rates under this statute. A review of these Boren Amendment cases indicates that three key issues have emerged: (1) as of 1990, providers have the right to sue states in federal court over Medicaid payment rates, (2) judicial interpretation of federal law in litigation brought against individual states has generally resulted in rulings favorable to providers, and (3) judicial decisions have sometimes dictated how states must pay for Medicaid services.

Settlement Agreement Constrains Changes to the Reimbursement System Through FY 1996

In 1986, the VHA filed suit in the U.S. District Court against the Commonwealth under the Boren Amendment. The VHA claimed that Medicaid reimbursement rates were not reasonable and adequate to meet the costs which must be incurred by efficiently and economically operated facilities. Before the Court could decide the case on its merits, a determination had to be made as to whether the Court had jurisdiction to hear the case. The Supreme Court of the United States decided in July 1990, that the U.S. District Court did have jurisdiction to hear the case.

The VHA litigation continued until settled in December 1990 and dismissed in February 1991 when an agreement was reached (Appendix F). The basic terms of the settlement agreement call for an adjustment to hospital payments for non-State hospitals through a payment adjustment fund. The fund is to be financed with State and matching federal dollars for a period of four fiscal years, from State FY 1993 through FY 1996. This amounts to Virginia placing $5 million into the fund the first effective year, $10 million in the second year, $15 million in the third year, and $20 million in the fourth year. Additionally, DMAS will be required to add two percentage points to the annual DRI-VA inflation factor for FYs 1993 through 1996. DMAS forecasts that for FYs 1993 and 1994 alone, this intensity adjustment will amount to more than $4.9 million in additional general fund expenditures.

The settlement agreement also established other terms regarding Medicaid hospital reimbursement. The most notable are that the Commonwealth has agreed not to implement changes to the reimbursement system prior to FY 1997, and a joint task force consisting of both parties to the suit is to reevaluate the reimbursement system beginning in January 1995. If no changes are made to the reimbursement system by the end of FY 1996, the payment adjustment fund is to be continued at the FY 1996 level. The agreement provides that DMAS may make changes to the reimbursement system only:

- In the event of federally mandated changes. If Medicare makes changes, it may likely affect Medicaid reimbursement.
- In the event of requirements by State or federal courts.
- In the event of a budget shortfall. However, changes must also impact the majority of the Virginia agencies, and percentage reductions cannot be more than any other agency.

PERFORMANCE OF THE INPATIENT REIMBURSEMENT SYSTEM

In keeping with SJR 180 requirements, JLARC staff analyzed the performance of the inpatient reimbursement system with regard to cost effectiveness and the sufficiency of reimbursement rates to provide access to quality care. A key concept for

understanding the analysis that follows is the difference between reported allowable costs and efficient allowable costs. Reported allowable costs are the costs reported to Virginia Medicaid by hospitals. These reported allowable costs may or may not be the same as efficient allowable costs, or those costs which are necessary to operate efficiently and economically.

This concept is important for understanding the relationship between Medicaid reimbursement rates and hospitals' reported allowable costs. On the one hand, the inpatient reimbursement system may be judged to be cost effective for the State because it has allowed access to care and has held increases in aggregate payments below the rate of increase in reported allowable costs. On the other hand, providers argue that rates have been insufficient because they have not kept pace with increases in reported allowable costs. This was the key issue in the VHA lawsuit.

Yet because the lawsuit was settled out of court, there has been no legal determination as to whether Virginia Medicaid's current inpatient reimbursement rates are sufficient to meet legal tests. However, because of precedents set in other states by the federal courts, in the future the State may still be asked to satisfy a court that Medicaid reimbursement rates are legally sufficient. Therefore, until any changes are made to the existing reimbursement system, issues raised in the VHA lawsuit will continue to be a concern.

The purpose here is not to attempt to resolve the issues raised in the lawsuit. Rather, it is to inform the General Assembly of (1) the key issues raised by the lawsuit, (2) the key issues in payment reform, and (3) the possibility of future legal challenges even after payment reform.

It also should be noted that DMAS was active in evaluating the reimbursement system during the VHA litigation. Consistent with 1987 Appropriation Act requirements, DMAS hired an independent consultant to evaluate various options for fine-tuning or changing the reimbursement system. However, according to the DMAS director, changes were not implemented because DMAS believed that the system already in place was equitable and met federal requirements.

Cost Effectiveness of the Inpatient Reimbursement System

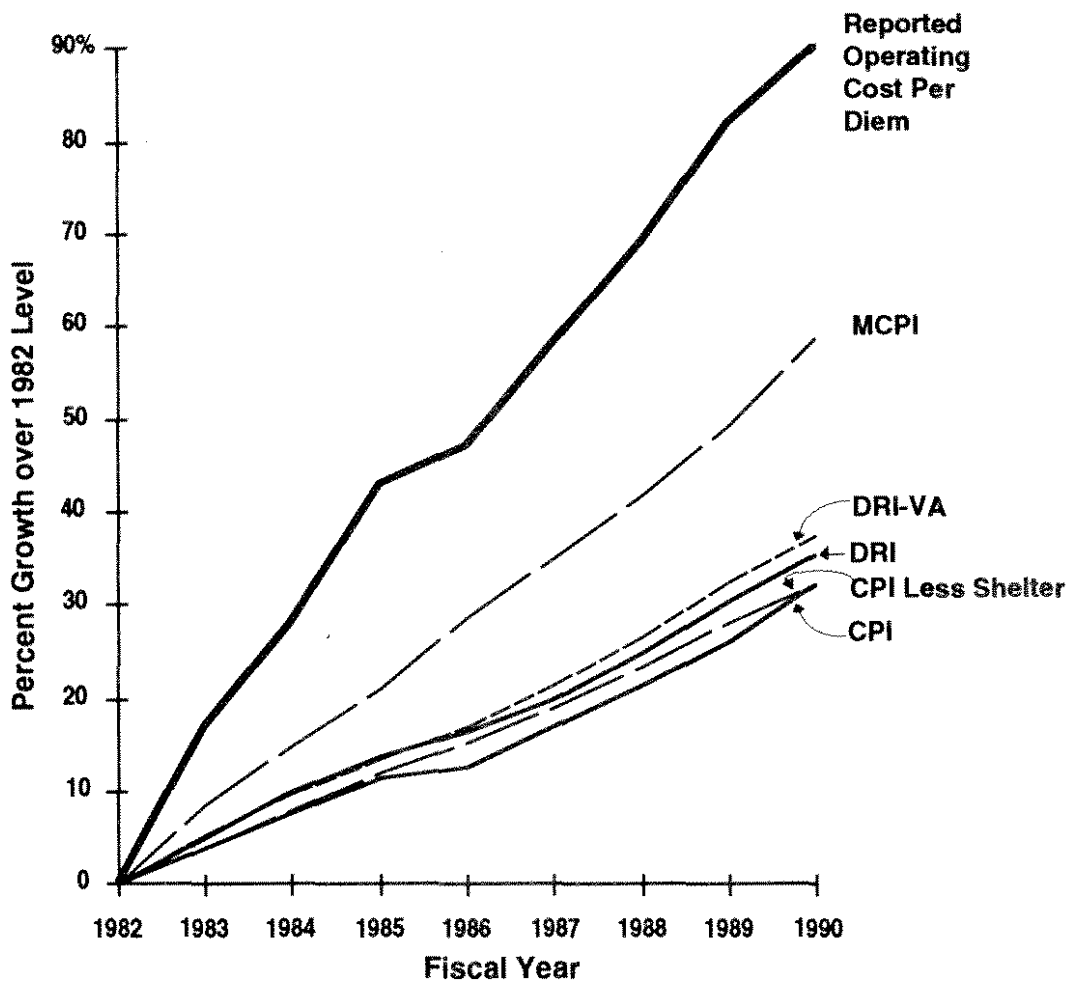
JLARC staff analysis indicates that the reimbursement system has controlled growth in payments for Medicaid inpatient operating costs. However, there are some concerns about the ability of the system to fully contain costs. These stem from: (1) the cost of the VHA litigation and the hospital settlement agreement, (2) the differential treatment of the two State teaching hospitals, (3) implementation of the disproportionate share adjustment policy, (4) cost-based reimbursement for capital expenditures, and (5) the structure of the peer grouping system.

Reimbursement System Has Limited Expenditure Growth Rates. The inpatient reimbursement system has helped to control the impact of hospital cost inflation on

Medicaid expenditures. Between FY 1982 and FY 1990, total reported allowable operating costs increased at a higher rate than each of the inflation indexes used by DMAS (at one time or another) to increase payment ceilings (Figure 18).

Figure 18

Comparison of Cumulative Growth Rates of Selected Inflation Indicators and Hospital Reported Operating Costs



Key: CPI = Consumer Price Index
CPI Less Shelter = CPI less housing and interest
MCPI = Medical Care Component of the CPI
DRI = U.S. Health Care Financing Administration Market Basket Index, developed by Data Resources, Inc.
DRI-VA = Virginia Specific Market Basket Index, developed by Data Resources, Inc.

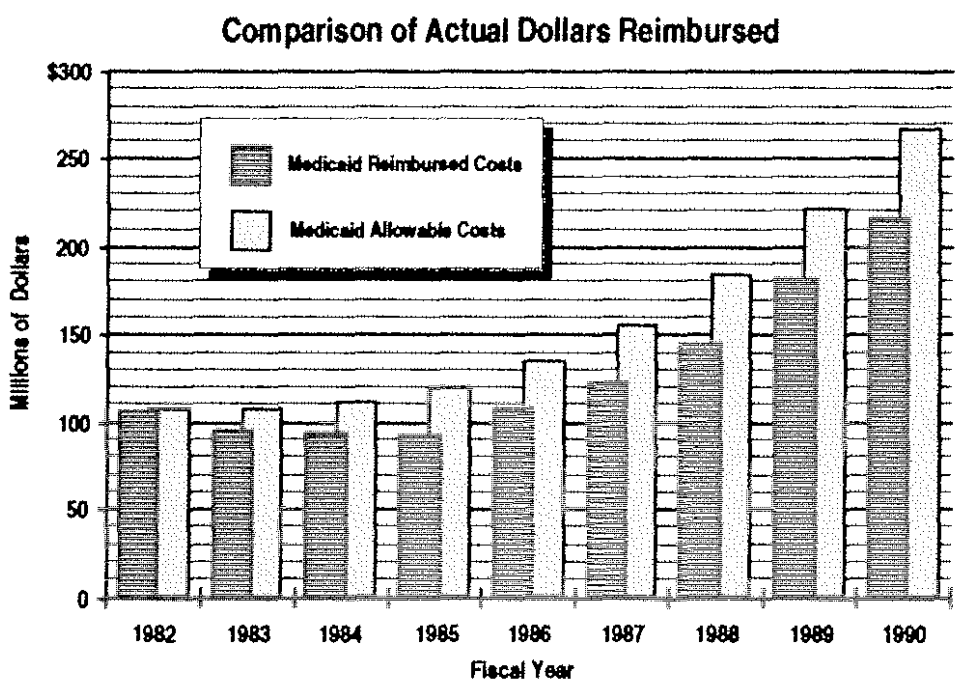
Notes: DMAS hospital data averaged by State fiscal year; all other data averaged by calendar year. CPI Less Shelter data after 1984 is forecasted, not actual.

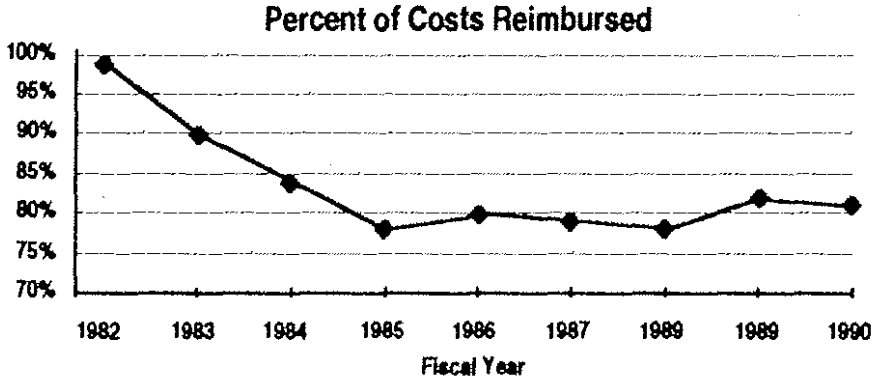
Source: JLARC staff analysis of inflation data from Bureau of Labor Statistics, DRI/McGraw-Hill, and Chase Econometrics Forecast; and DMAS hospital payment data (includes all participating hospitals).

Because operating cost payments did not keep pace with the growth in reported allowable costs, the percent of reported allowable costs reimbursed decreased over time. According to DMAS data on all participating hospitals, in State FY 1982, 99 percent of all inpatient reported allowable costs were reimbursed. In State FY 1990, hospitals were reimbursed for 81 percent of their reported allowable costs (Figure 19).

Figure 19

Comparison of Medicaid Inpatient Reported Allowable Costs and Reimbursed Costs, FY 1982 - FY 1990





Source: JLARC staff analysis of DMAS hospital payment data. Includes payments for operating costs, capital costs, efficiency adjustments, disproportionate share adjustments, and medical education costs at all participating hospitals.

By paying prospectively-determined rates rather than reported allowable costs, the State has effectively controlled Medicaid inpatient spending. According to DMAS data for all in-state acute care hospitals, if reimbursement was based solely on reported allowable costs, during hospital FY 1990 DMAS would have paid hospitals $187.1 million for operating costs alone. However, DMAS actually paid $122.8 million. As a result, DMAS saved $64.3 million (approximately $32.2 million in State general funds) by using its prospective reimbursement system.

Another indicator of the cost-effectiveness of the existing system is that Virginia Medicaid pays a lower proportion of reported allowable costs than Medicare's diagnosis related group (DRG) system. According to a recent study conducted by the U.S. Prospective Payment Assessment Commission (ProPAC), in 1989 Virginia Medicaid reimbursed hospitals at 77 percent of reported allowable cost, but Medicare reimbursed Virginia hospitals at 91 percent of reported allowable cost.

Additionally, ProPAC found that in 1989 the national average for Medicaid reimbursement to hospitals was 78 percent of reported allowable costs. Therefore, compared to other states, Virginia was just below the nation's average in terms of percent of costs reimbursed. (Appendix G shows a listing of the percent of Medicaid reported allowable costs reimbursed by state.)

Hospital Settlement Agreement and Litigation Have Resulted in Unexpected Costs. Although the inpatient reimbursement system has been generally cost effective, it has also been the target of litigation which resulted in substantial unexpected costs. According to the terms of the settlement agreement, the State will pay will more than $50 million in general funds for additional reimbursement over four years (FYs 1993 through 1996). Also, according to the Office of the Attorney General, more than $3.8 million was billed for expert witnesses and consultants during the litigation. Half of this amount, or approximately $1.9 million, is to be paid by the State and the other half by the federal government (because of the 50/50 federal match). Related costs for attorney time and DMAS staff time were substantial but cannot be quantified.

Reimbursement Policy for State Teaching Hospitals Increases Medicaid Costs. The payment policy for the two State teaching hospitals is a concern because it results in the payment of significantly higher rates to these relatively expensive institutions. As explained earlier, the two State teaching hospitals are treated more favorably than the other hospitals under the current Medicaid inpatient reimbursement system. In part because of their teaching mission, these hospitals are also among the most expensive acute care hospitals in the State. Further, they are among the top providers in the State in terms of the volume of Medicaid inpatient care provided. As a result of these factors, while UVAMC and MCVH provided 16 percent of the total Medicaid inpatient days in FY 1990, they received 28 percent of total inpatient hospital payments.

The proportion of total payments received by the State teaching hospitals is likely to be even larger in FY 1992 and beyond because of the changes in indigent care funding required by the 1992 Appropriation Act. As explained earlier, the Appropriation Act enacted a plan to reduce general fund appropriations to these institutions, and to

replace these funds with higher Medicaid payments which would be shared by the State and the federal government. In order to accomplish this action, the State teaching hospitals are now receiving eleven times what they would have received under the previous DSA policy. This policy will have the effect of channeling a larger proportion of total Medicaid payments to these institutions.

As explained later in this chapter, while the payment policies for the State teaching hospitals may not be cost effective for the Medicaid program in particular, they have resulted in general fund savings for the State as a whole. JLARC staff will examine the long-term implications of payment policy for the teaching hospitals in a separate report on indigent health care programs.

Disproportionate Share Policy Exceeds Federal Requirements. As explained earlier, federal law requires that states take into account the situation of hospitals serving a disproportionate number of Medicaid or low-income patients through higher Medicaid reimbursement. Federal law does allow for a State to use criteria beyond the federal minimum (as noted earlier, the federal minimum is either one standard deviation above the mean or 25 percent low-income utilization). As noted earlier, Virginia has chosen to implement more generous criteria, in order to support hospitals with Medicaid utilization rates above eight percent. This approach has meant that since 1987 the State reimbursed some hospitals at a higher rate than required under federal law.

In FY 1990, 41 in-state acute care hospitals received DSA payments. Twenty-eight of these hospitals fell between the DMAS criteria for disproportionate share of eight percent total Medicaid utilization and the minimum federal criteria for disproportionate share. As a result, an estimated $2.3 million was paid to Virginia acute care hospitals that was not required by federal law. This amounted to an estimated $1.2 million in State general fund dollars expended beyond federal requirements.

Incentives for Capital Cost Reimbursement Hinder Cost Effectiveness. As previously mentioned, hospital capital costs are reimbursed at 100 percent of reported allowable cost. This policy creates no incentive for hospitals to limit their capital expenditures. Capital payments as a proportion of total payments have increased over time. In FY 1982 they were estimated by a DMAS consultant to be eight percent of Medicaid hospital expenditures. In FY 1990 capital costs were an estimated 15 percent of total payments. Also, according to analysis of DMAS data on in-state acute care hospitals, annual reimbursement for capital expenditures increased by 92 percent from an estimated $12.2 million in FY 1986 to an estimated $23.4 million in FY 1990.

One option for restraining the growth in capital costs is to reimburse these costs prospectively. However, such a system would be complex and may be difficult to implement. Recognizing this difficulty, Medicare plans to phase in a prospective system for capital reimbursement over the next decade. DMAS should also study the feasibility of developing a different capital cost reimbursement methodology which would create incentives for hospitals to contain their capital costs.

Recommendation (5). **The task force on inpatient reimbursement should examine the pass-through methodology for capital cost reimbursement and evaluate alternative methods for reimbursing hospital capital costs.**

Peer Grouping Structure May Not Meet Objectives. One objective for a reimbursement system is to recognize justifiable differences in the costs of providing services. If justifiable differences can be identified, then cost effectiveness may be increased to the extent that only legitimate costs are reimbursed. This will help to avoid situations in which some hospitals are overreimbursed, while others are underreimbursed. One way to recognize justifiable differences in costs is to create peer groups of hospitals with similar characteristics, and to differentiate payments for each peer group.

DMAS's peer grouping system assumes that hospital operating costs differ according to their location and size. For example, the system implies that operating costs for larger urban hospitals should be different than for smaller urban hospitals. Similarly, operating costs should differ among smaller urban hospitals and smaller rural hospitals. If location and bed size caused substantive differences in reported operating costs, one would expect that among peer groups operating costs would vary significantly from peer group to peer group with little overlap across peer groups.

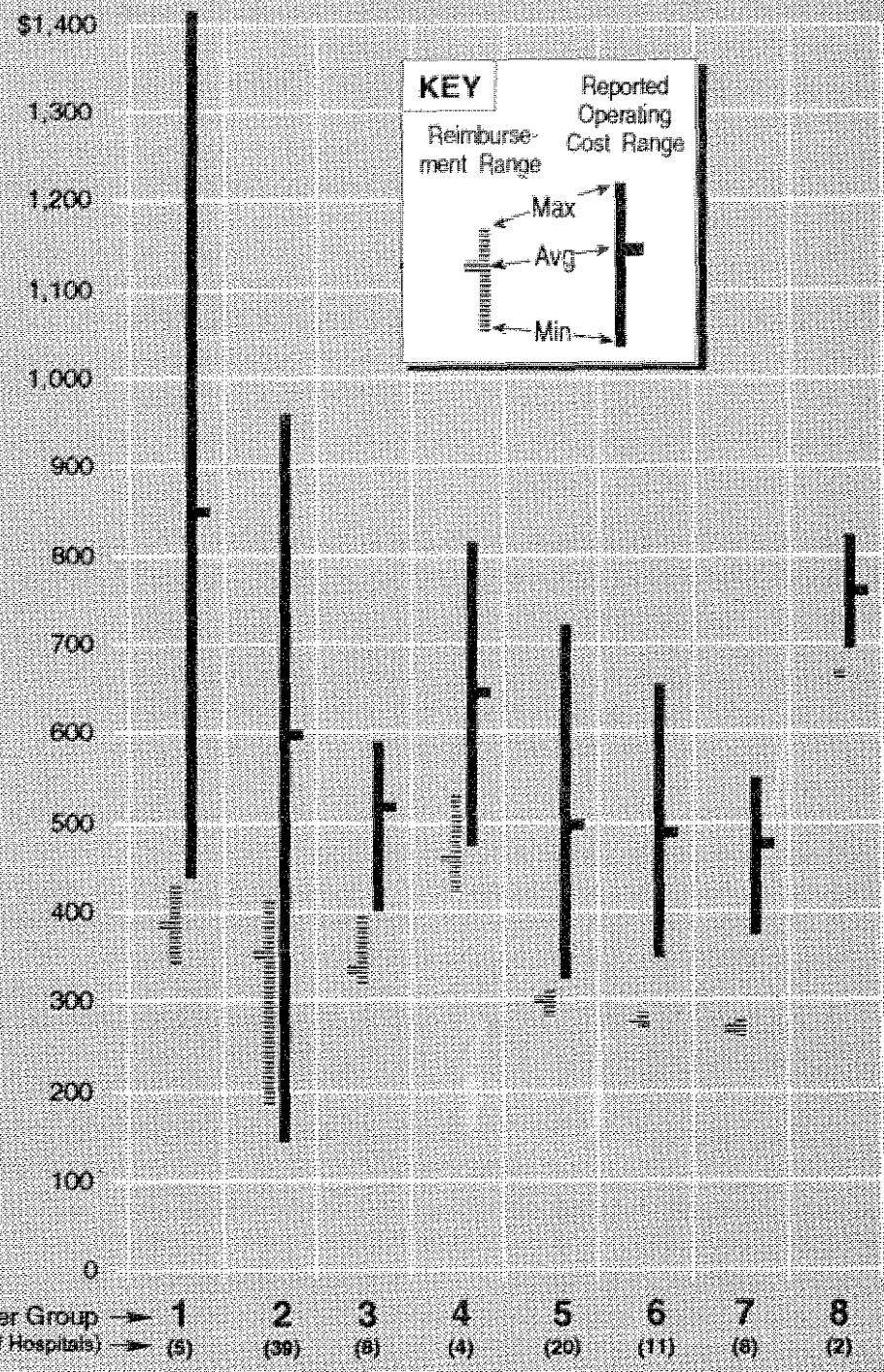
Analysis of DMAS data for in-state acute care hospitals does not indicate consistent differences in reported allowable costs among peer groups (Figure 20). Although reported operating costs may vary in some cases, there is significant overlap among the peer groups. The overlap across peer groups indicates that location and bed size alone may not account for a significant portion of the differences in hospital costs. As a result, some hospitals may be reimbursed at an inappropriately high level compared to other hospitals. Others may be reimbursed at inappropriately low levels.

Although the existing peer grouping structure may account for some differences in hospital costs, there are other factors which may better differentiate among hospitals. For instance, the Medicare reimbursement system uses its own case mix indicator for determining reimbursement. However, DMAS has not utilized a Medicaid case mix indicator, so it has not been possible to assess the effects of case mix on Medicaid hospital costs. Some other states which use peer groups have also used or considered using hospital service mix, payor mix, Medicaid volume, and specialty service status (for example, children's hospitals).

Recommendation (6). **If the task force on inpatient reimbursement decides to continue the use of peer groups, it should: (1) reexamine the existing peer grouping system, and (2) evaluate alternative peer grouping criteria which might allow for greater discrimination among hospitals with legitimate differences in costs. The task force should evaluate such factors as case mix, hospital service mix, payor mix, Medicaid volume, and specialty service status.**

Figure 20

Reported Operating Cost Compared to Reimbursement Per Diem, by Peer Group, FY 1990



Source: JLARC staff analysis of DMAS hospital payment data. Includes in-State acute care hospitals only. Data compiled by hospital fiscal year.

Clients Have Access to Hospital Care

Medicaid patients have access to a broad base of hospital providers. All of the 97 acute care hospitals in the State accept Medicaid patients and have met the State's standards for licensure (excluding the State teaching hospitals since they are not licensed by the State). These hospitals have either been accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), or are certified by the State to be Medicaid and/or Medicare providers.

While Medicaid recipients may use any of the acute care hospitals in the State, the majority of acute care services are provided by the State teaching hospitals and larger urban hospitals (Appendix D). Ten hospitals accounted for 55 percent of all acute care inpatient hospital expenditures in FY 1990. These hospitals also tend to be either government or non-profit providers, and are located in health service areas (HSAs) IV or V, which include the Richmond, Southside, and Tidewater regions of the State.

Providers Dissatisfied With Rates

Medicaid is a minor payor for most hospitals. However, it is a major source of revenue for some individual hospitals. A primary concern of providers is the gap between reported allowable costs and reimbursed costs. Providers have argued that reimbursement rates should be increased to better reflect changes in the industry which have driven up costs.

Medicaid a Minor Payor for Most. DMAS data for in-state acute care hospitals indicates that Medicaid revenue may have a different financial impact on different hospitals. In FY 1990, Medicaid inpatient payments as a percentage of net patient revenue ranged from 25 percent at one hospital to less than one percent at seven hospitals. More than 75 percent of the hospitals received less than ten percent of their net patient revenue from Medicaid inpatient payments. Of the ten hospitals and hospital systems that drew the greatest proportion of their net patient revenues from Medicaid, most are urban, non-profit hospitals. The ten hospitals are located in HSAs III, IV, and V (Appendix D).

It also appears that hospitals with the highest Medicaid utilization rates tend to report negative operating margins (Table 2). Based on FY 1990 data, more than 80 percent of hospitals with Medicaid utilization rates between zero and 15 percent reported a positive operating margin. By contrast, 57 percent (four of seven) of hospitals with Medicaid utilization rates between 16 and 20 percent reported positive operating margins, and 50 percent (five of ten) of those hospitals with Medicaid utilization rates above 20 percent reported positive margins. Medicaid utilization rates for individual hospitals are listed in Appendix D.

While it could be argued that there is a relationship between operating margin status and Medicaid utilization rates, it should not be assumed from this analysis alone that Medicaid reimbursement is a major cause of negative margins at hospitals.

Table 2

Distribution of Hospitals by DMAS Utilization and by Operating Margin Status, FY 1990

	DMAS Utilization Level					
	0-5% (N=23)	**6-10%** (N=26)	**11-15%** (N=17)	**16-20%** (N=7)	**20%+** (N=10)	**Total** (N=83)
Positive Margin	83%	81%	88%	57%	50%	77%
Negative Margin	17%	19%	12%	43%	50%	23%

Note: Operating margins were calculated by State fiscal year, and percent operating cost reimbursed was calculated by hospital fiscal year. This includes in-state acute care hospitals only. Hospitals affiliated with a hospital system are not included since appropriate data was not available.

Utilization level refers to the percentage of total inpatient days consumed by Virginia Medicaid patients.

Source: JLARC staff analysis of Department of Medical Assistance Services and Health Services Cost Review Council FY 1990 data.

Negative margins may be the result of a number of factors including payor mix, occupancy levels, hospital productivity and efficiency, and others. The impact of Medicaid reimbursement on hospital operating margins would have to be determined on a hospital-by-hospital basis.

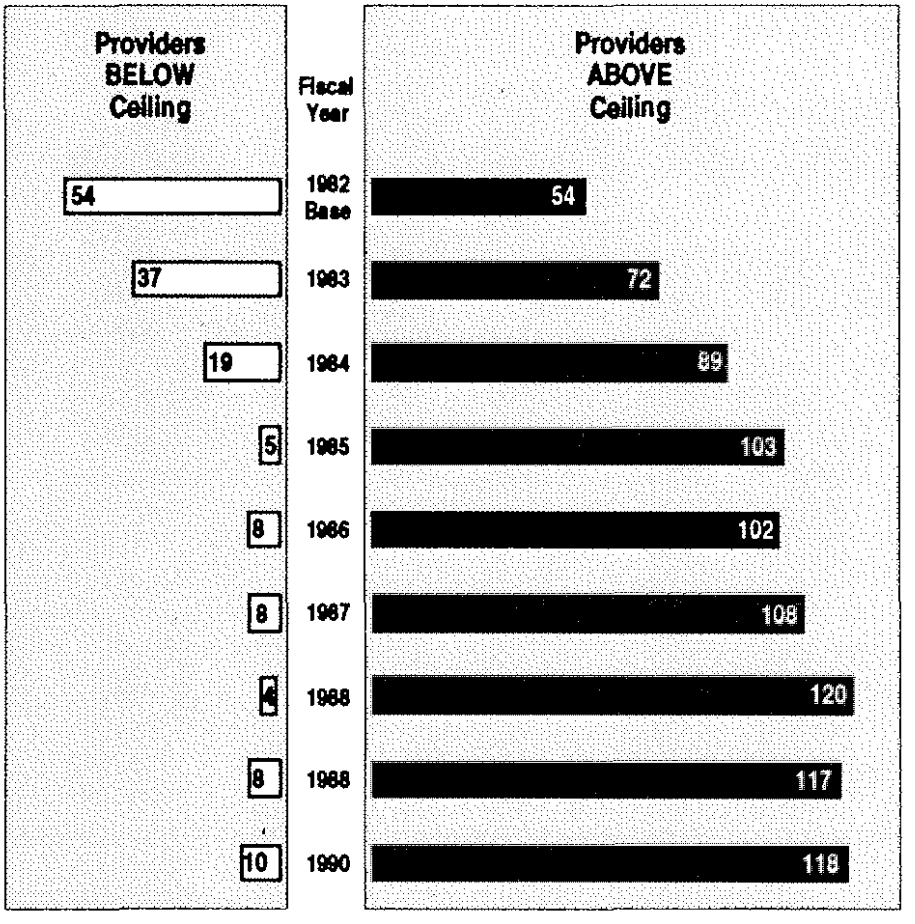
Increasing Gap between Reimbursed and Reported Allowable Costs. The vast majority of acute care hospitals have reported allowable costs above their reimbursement ceiling (Figure 21). According to DMAS data for all participating providers, in FY 1982, 54 providers were above their ceiling and 54 were below their ceiling. In FY 1990, 118 providers were above their ceiling and ten providers were below their ceiling. (Note: this data as compiled by DMAS includes 97 acute care providers, 16 rehabilitative hospitals, nine out-of-state hospitals and six neonatal intensive care units for FY 1990.)

The gap between reported allowable operating costs and reimbursed costs varied for different hospitals. In FY 1990, the percent of reported allowable operating costs reimbursed for all in-state acute care hospitals ranged from 122 percent to 27 percent, with a statewide mean of 62.5 percent (Table 3). Overall, 46 (47 percent) of the 97 acute care hospitals were above the statewide mean for percent of reported allowable operating costs reimbursed. Fifty-one hospitals (53 percent) were below the statewide mean.

In FY 1990, urban hospitals (including the State teaching hospitals) tended to be reimbursed a larger proportion of their reported allowable operating costs than rural hospitals. On average, urban hospitals were reimbursed for 63.8 percent of their reported operating costs, compared to 60.6 percent for rural hospitals. Also, a smaller proportion of urban hospitals fell below the statewide mean. Forty-seven percent of the urban hospitals were below the statewide mean, compared to 62 percent of the rural hospitals.

Figure 21

Number of Providers Whose Payments Fell Below and Above Their Ceilings, FY 1982-FY 1990



Note: The total number of providers may vary from year to year due to industry changes over time. Includes all hospitals which participate in Virginia Medicaid; calculated according to State fiscal years.

Source: JLARC staff analysis of DMAS hospital payment data.

Focusing on the urban peer groups, those in peer group one (0-100 beds) tended to receive a lower percentage of their operating costs (53.6 percent on average) than the larger hospitals. This occurred primarily because the three specialty hospitals in this group (Richmond Eye and Ear Hospital, Gill Memorial Eye Ear Nose and Throat Hospital, and Children's Hospital of Richmond) were well below the statewide average for percent of reported allowable cost reimbursed. The remaining two hospitals in this group were well above the statewide average.

The State teaching hospitals (peer group eight), on average, were reimbursed a greater percent of their operating costs than the other acute care in-state hospitals.

Table 3

Percent of Reported Allowable Operating Costs Reimbursed By Hospital Type, FY 1990

Hospital Type	N	Average Percentage of Reported Allowable Operating Costs State Reimbursed	Number & Percent Above State Average	Number & Percent Below Average
ALL	97	62.5%	46 (47%)	51 (53%)
All Urban	58	63.8	31 (53%)	27 (47%)
All Rural	39	60.6	15 (38%)	24 (62%)
Urban Peer Groups				
1 (0-100 beds)	5	53.6	2 (40%)	3 (60%)
2 (101-400 beds)	39	62.4	18 (46%)	21 (54%)
3 (401-600 beds)	8	66.0	5 (63%)	3 (37%)
4 (600+ beds)	4	73.1	4 (100%)	0 (0%)
8 (MCVH & UVAMC)	2	88.3	2 (100%)	0 (0%)
Rural Peer Groups				
5 (0-100 beds)	20	62.8	9 (45%)	11 (55%)
6 (101-170 beds)	11	58.7	4 (36%)	7 (64%)
7 (170+ beds)	8	57.6	2 (25%)	6 (75%)

Source: JLARC staff analysis of Department of Medical Assistance Services data, FY 1990. Includes in-state acute care hospitals only.

UVAMC and MCVH received an average of 88.3 percent of their reported allowable operating costs in FY 1990, which was well above the statewide average. This can be attributed in part to the fact that the teaching hospitals were placed in their own peer group in 1988 and that their ceiling rates were redetermined based on 1987 reported allowable costs.

Focusing on the rural peer groups, the average percentage of reported allowable operating costs reimbursed for the smallest hospitals (peer group five) was just above the statewide average of 62.5 percent. The averages for peer groups six and seven were below the statewide average. For all three rural peer groups, the majority of individual hospitals fell below the statewide average.

This analysis has focused on one component of the reimbursement system — the level of reimbursement for reported allowable operating costs — for purposes of illustrating the effects of the basic reimbursement system design on all hospitals. However, it should be noted that 41 hospitals received disproportionate share adjustments in FY

1990, which had the effect of increasing the overall percentage of operating costs reimbursed at these institutions. With the inclusion of both operating cost payments and disproportionate share payments in the calculation, it is estimated that hospitals were reimbursed an average of 64.6 percent of their reported allowable operating costs, compared to the estimate of 62.5 percent for operating cost payments alone.

Provider Claims for Higher Payments. The reimbursement system design assumes that hospitals should have been able to hold their Medicaid inpatient costs to their FY 1982 peer group median, plus DMAS's chosen inflation adjustments. However, the VHA's position has been that the growing gap between reported allowable costs and reimbursed costs indicates the annual inflation adjustments used by DMAS have not kept pace with the necessary costs of serving Medicaid patients.

Key to the providers' argument is the proposition that the annual inflation indicators were not sufficient to recognize certain fundamental changes in the hospital industry which have caused costs to increase. In interviews, VHA representatives and staff of site visit hospitals pointed to many of the factors in hospital cost inflation which were explained earlier in Chapter III. Among those factors identified by the providers were the costs of new technologies, increasing costs of labor and supplies, and increasing complexity of case mix. As pointed out in Chapter III, some of these costs are in the control of the hospitals, while others are beyond the direct control of hospitals.

An additional concern of providers relates to the use of the per diem basis of payment. As noted earlier, current inpatient reimbursement rates are based on 1981 average per diem costs which have been adjusted upward on an annual basis. Providers claim that the most expensive services are typically rendered during the first few days of the visit. DMAS data shows that the average length of stay for Medicaid patients has declined from an estimated 6.44 in FY 1982 to an estimated 5.46 in FY 1990 (these figures are estimated since all providers to do not uniformly report this data to DMAS). As a result, the total cost of treating patients is now averaged over fewer days. Therefore, providers argue that this has resulted in an increase in per diem costs that has not been recognized through the annual inflation adjustments.

Another concern identified by the VHA and the site visit hospitals is that payment for services below reported cost leads to cost shifting. Cost shifting refers to the use of profits from privately insured patients to subsidize losses from publicly insured and uninsured patients. Nationally and in Virginia, providers argue that unreimbursed costs for Medicare and Medicaid patients are shifted to other payors, thereby increasing hospital charges and the cost of private insurance. JLARC staff did not conduct an analysis of the degree to which cost shifting due to Medicaid inpatient reimbursement may cause increases in the prices paid by private purchasers of hospital care.

However, a national study conducted by ProPAC indicates that while cross-subsidization among payers does occur in the hospital industry, it is unclear whether a decrease in prices paid by public programs necessarily leads to an increase in the prices paid by private purchasers. Other than an increase in prices for private payors, some

hospitals may be able to cover unreimbursed costs by improving their efficiency and effectiveness, or by reducing expenses. Further study would be required to determine whether Medicaid inpatient reimbursement rates necessarily lead to higher prices for private payors in Virginia.

CONSIDERATIONS FOR INPATIENT REIMBURSEMENT REFORM

The General Assembly may wish to consider four issues as the State embarks on inpatient reimbursement reform. First, the long-term viability of the inpatient reimbursement system will depend in part on its ability to meet legal challenges under the Boren Amendment. Virginia Medicaid's hospital providers, as a group, can be expected to demand higher reimbursement rates. The recent history of Boren Amendment lawsuits in Virginia and other states indicates that it is incumbent on states to prove that the rates they pay to providers meet the test of the Boren Amendment. In order to ensure that the Commonwealth reimburses providers at the least required cost while still meeting the test of the Boren Amendment, the Commonwealth should strengthen its capacity to evaluate hospital efficiency levels and to document its findings.

The second issue stems from the fact that the Virginia Medicaid program is both a third-party purchaser of health care for Medicaid clients and a financing mechanism for the State teaching hospitals. A third issue, closely related to the second, is that the Commonwealth must decide whether to implement federal disproportionate share payment requirements in the least costly manner or to continue its current policy of providing additional support to hospitals with relatively high Medicaid caseloads. The fourth issue relates to whether Medicaid reimbursement policy should be designed to provide a specific level of support to certain rural providers.

Because choices need to be made prior to revising the reimbursement system, and because there is little potential to implement revisions prior to FY 1997, JLARC staff did not fully evaluate alternative reimbursement systems at this time. Other states use a variety of different systems which illustrate the range of possibilities. Alternative reimbursement systems from other States are summarized in this chapter, and further detail can be found in Appendix H. The task force on inpatient reimbursement should consider other states' reimbursement systems as it decides how to implement the General Assembly's intentions for inpatient reimbursement.

The Boren Amendment and the Need for Efficiency Information

Currently, there are two separate initiatives underway to develop hospital efficiency indicators. DMAS has hired a consultant to develop a set of efficiency indicators for defending and developing Medicaid inpatient reimbursement policy. At the same time, the General Assembly has directed the Health Services Cost Review Council (HSCRC) to develop a series of hospital efficiency measures for the broader purpose of controlling health care costs.

To develop viable efficiency measures it is necessary to: (1) develop a reliable database of hospital efficiency data, and (2) specify the efficiency standards which hospitals should be expected to meet. For example, in comparing hospitals on a particular criteria, efficiency for Virginia hospitals might be defined as the 50th national percentile, the 25th national percentile, or some other reference point. Efficiency criteria might also involve comparisons against State or regional norms. The choice of efficiency criteria could have a direct impact on Medicaid expenditures, as well as future litigation.

Considering the implications that further litigation could have for the Commonwealth, it is important that the General Assembly have an active role in the development of hospital efficiency indicators. The General Assembly might wish to clarify its intent for the level of efficiency which Virginia hospitals should be expected to meet. The General Assembly might also wish to ensure that the separate efforts being undertaken by DMAS and the HSCRC are closely coordinated so that State funds are used efficiently, and so that the two entities do not work at cross-purposes.

Recommendation (7). **The General Assembly may wish to consider ensuring that current efforts to develop hospital efficiency indicators are coordinated so that: (1) the Department of Medical Assistance Services and the Health Services Cost Review Council have legislative input on the development of efficiency indicators, (2) DMAS and the HSCRC do not work at cross-purposes in developing such indicators, (3) the efforts are not unnecessarily duplicative, and (4) the efforts to develop indicators are completed with the minimum amount of State funding.**

Reimbursement Policy for State Teaching Hospitals

As explained earlier, the special treatment of the two State teaching hospitals has led to significantly higher levels of inpatient reimbursement for the State teaching hospitals compared to other acute care hospitals. It could be argued that this policy is not, in a strict sense, cost effective for the Virginia Medicaid program. However, this policy has been cost effective for the State general fund. By placing the State teaching hospitals in their own peer group and granting them special DSA status, the State has been able to reduce its total commitment of general funds to these institutions.

It should be recognized, however, that one reason for the growth in Medicaid hospital spending is the special treatment of the State teaching hospitals, and that this policy was enacted in an effort to conserve State general funds during a time of fiscal stress. The long-term implications of this reimbursement policy are currently unclear. The policy will be reviewed in more depth in a separate JLARC report on indigent health care.

Recommendation (8). **The General Assembly may wish to clarify its intent for the continuation of special Medicaid reimbursement policies for the State teaching hospitals, pending additional information to be provided in a separate JLARC report on indigent health care programs.**

Disproportionate Share Policy

SJR 180 requested JLARC to examine whether federal requirements have been implemented in the most effective and least costly manner. As explained earlier, Virginia Medicaid has chosen to implement disproportionate share criteria which exceed the minimum federal requirements. Strictly speaking, this policy represents a State decision against implementing a federal requirement in the least costly manner. However, as it stands, this disproportionate share policy also allows the State to increase the use of federal matching funds to support a number of hospitals (41 in FY 1990) with Medicaid caseloads above eight percent. This trade-off between cost-efficient implementation of federal requirements and the use of federal funds to benefit higher volume providers should be recognized as the General Assembly considers Medicaid policy in the future.

Recommendation (9). **The General Assembly may wish to clarify its intent for the continuation of a more generous Medicaid hospital disproportionate share adjustment policy than is required by federal law.**

Reimbursement Policy Can Be Used to Assist Rural Hospitals

The Joint Commission on Health Care has expressed concern about the viability of some of the State's rural hospitals. In its 1990 report (Senate Document 35), the Joint Commission identified 14 hospitals which had negative operating margins, and which were located more than twelve miles from the next nearest hospital. The report stated that "the combined criteria of fiscal stress and geographic isolation suggest that the continued operation of these hospitals may be important from the perspective of preserving access to care." The report also pointed out the need to study the viability of these hospitals, and to consider the feasibility of developing criteria for determining whether assistance to certain hospitals may be desirable in order to preserve access to care in isolated areas of Virginia.

As shown in Table 3, in FY 1990 24 of 39 rural hospitals fell below the statewide average for percent of reported allowable operating costs reimbursed. Five of these 24 hospitals were among the 14 identified in the Joint Commission report as experiencing fiscal stress.

These findings raise the question of whether it might be desirable to make special Medicaid payment provisions for some rural hospitals. Currently, Medicare recognizes the special needs of some rural hospitals by establishing special payment rates for "sole community providers" and "rural referral centers." To achieve a sole community provider status, a provider must be isolated due to weather or travel, and there should be an absence of other hospitals in the region. Rural referral centers must meet particular national criteria based upon their case mix and other factors. However, only three of the fourteen hospitals identified in the 1990 Joint Commission report receive these special Medicare payments.

In the next generation of Medicaid inpatient reimbursement, the General Assembly could consider implementing special payment provisions for some rural

hospitals. The State may not necessarily want to adopt Medicare's definitions of sole community providers and rural referral centers. However, through the use of special payment mechanisms, the General Assembly could attempt to target additional payments to those hospitals which it considers to be most in need.

Recommendation (10). **The General Assembly may wish to direct the task force on inpatient reimbursement to consider establishing special Medicaid inpatient hospital payments for some rural hospitals, within State budgetary constraints.**

Alternative Reimbursement Systems

Based on a review of reimbursement systems in other states, there does not appear to be one reimbursement system that is clearly better than another. Because each state may have different objectives, different industry and regional characteristics, as well as share different types of relationships with their local hospital association, no one reimbursement system fits all situations.

A wide variety of payment systems are used by other states. The most significant trend of the 1980s was the number of states shifting from retrospective, cost-based methods to prospective payment systems. Few states remain which do not pay for inpatient services on a prospective basis. For example, in 1981 ten states had prospective reimbursement systems, but by 1991, 41 states had prospective reimbursement systems (Figure 22).

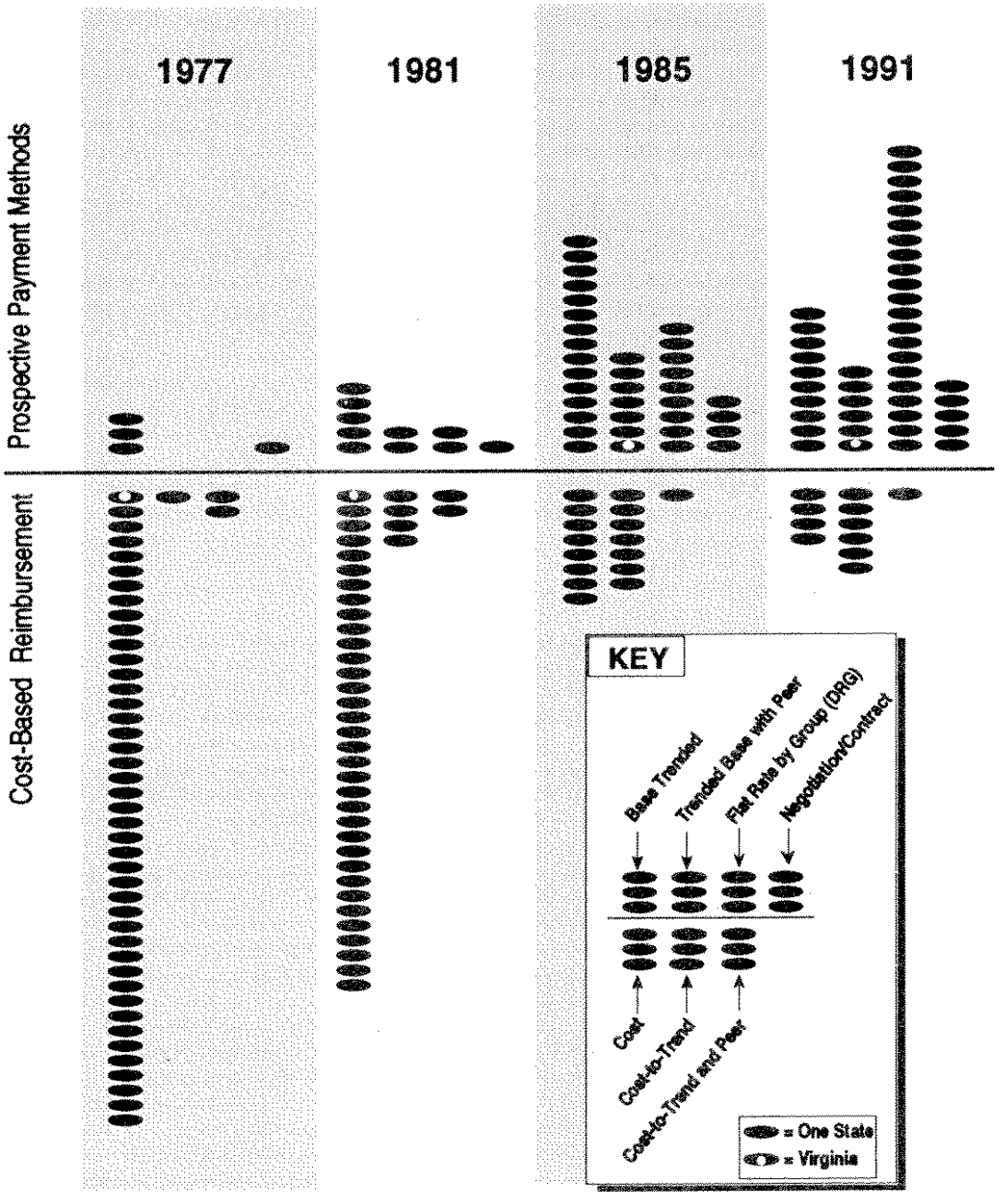
As of July 1990, DRGs were used by 20 states. DRGs determine payment on a per case basis, and differentiate payment according to the patient's illness. No two states share the same DRG system, and each system has similarities and differences with Medicare's DRG payment system. The remaining fully prospective Medicaid payment systems used by other states vary, but can be classified into three different groups: base trended, trended base with peer, or negotiated contracting.

As of July 1990, base-trended systems were in effect in ten states. These systems use inflation factors to establish a prospective rate on a per diem or per admission basis. Some systems use the previous year's costs as a basis for payment, while others project payment from a fixed base year. Base-trended-with-peer systems apply peer group limits to base year trending and are used by six states including Virginia. Negotiated/contracting systems are used by five states in one way or another. Virginia is also in the process of pilot testing this method in the Tidewater area.

System designs can also vary according to the unit of payment — for example, per case, or per diem. Choices must also be made about the method for determining a reasonable standard for payment, such as peer group limits, hospital limits, or statewide limits. An update or inflation factor such as the DRI or the CPI must also be chosen. The way in which capital and other pass-through costs are handled also varies by state.

Figure 22

Number of States with Cost-Based *vs* Prospective Systems for Medicaid Inpatient Hospital Payment, 1977-1991



Notes: Some states have more than one system in effect.
Years are as of October 1, except 1991, which is as of July 1.

Source: JLARC staff graphic based on data from ABT Associates, Medicaid Payment Methodologies for Inpatient Hospital Services, August 1991.

Each state's reimbursement system appears to have been designed according to each state's unique hospital environment and reimbursement objectives. For example, some DRG systems, such as the state of New York's, are complex in design to ensure equity among providers. Other systems are designed to be particularly effective at limiting Medicaid hospital expenditures.

There are trade-offs associated with each of the different reimbursement systems. These trade-offs are related to balancing administrative costs and burdens, patient access to care, impacts on the state budget, impacts on the providers, and the legality of the system. Each state has had to make its own choices with respect to how to balance these issues. For this reason, it is vital that the General Assembly clarify its intent for Medicaid reimbursement prior to the design and implementation of a revised inpatient reimbursement system, and that the task force develop a system which can accomplish the objectives of the General Assembly.

Recommendation (11). **The task force on inpatient reimbursement should consider other states' reimbursement systems, or elements of those reimbursement systems, which could accomplish the General Assembly's objectives for: (1) the use of hospital efficiency indicators, (2) reimbursement of the State teaching hospitals, (3) disproportionate share policy, (4) reimbursement of rural hospitals, and (5) other Medicaid reimbursement issues.**

V. Outpatient Hospital Reimbursement

Outpatient services are of increasing importance to Virginia's hospitals. Since the early 1980s, the number of hospitals with organized outpatient services has doubled. Over the same period, there have been significant increases in the number of outpatient visits as well as the proportion of hospital revenues derived from outpatient services. This movement toward outpatient service has been reflected in the growth in Medicaid spending for outpatient hospital services. Medicaid payments for outpatient hospital services exceeded $83 million in FY 1991, and currently represent seven percent of total Medicaid spending for medical services.

In light of this growth, it is important to maintain cost-effective reimbursement policies for outpatient hospital services. In keeping with Senate Joint Resolution (SJR) 180 (1991), this chapter addresses the cost effectiveness of the Medicaid outpatient hospital reimbursement system and the sufficiency of outpatient hospital reimbursement rates to provide quality care at the lowest required cost. Moreover, the interpretation of federal requirements and alternative administrative methods for outpatient reimbursement are discussed.

For the most part, Virginia Medicaid follows Medicare's method of outpatient reimbursement. Under this system, providers are reimbursed for their reported allowable costs of providing services to a Medicaid patient. JLARC staff analysis indicates that the incentives created by the outpatient reimbursement system do not encourage cost-effective delivery of services. Cost-based reimbursement creates few incentives for providers to contain costs. With some exceptions, providers are reimbursed for their full cost of providing service regardless of their efficiency.

In response to this concern, the U.S. Prospective Payment Assessment Commission (ProPAC) has recommended that the Medicare program adopt a prospective payment system for outpatient hospital services. (Congress has not yet acted on this proposal). The Department of Medical Assistance Services (DMAS) should develop a prospective reimbursement system for Medicaid outpatient hospital services as soon as the settlement agreement allows. Developing a prospective payment system is a complex task. If Medicare does not adopt prospective payment for outpatient hospital services, then the Commonwealth will have to decide whether to depart from Medicare principles and develop its own prospective payment system. Also, reform of outpatient hospital reimbursement should be closely coordinated with the planned re-evaluation of inpatient reimbursement policy in 1995.

OVERVIEW OF THE OUTPATIENT REIMBURSEMENT SYSTEM

Virginia Medicaid's outpatient reimbursement system for hospitals is distinctly different from the inpatient reimbursement system. Most outpatient hospital services are reimbursed by Medicaid on a retrospective cost basis, while inpatient services are reimbursed on a prospective, per diem basis.

Virginia Medicaid's outpatient reimbursement system is also based on Medicare's principles of reimbursement. Under Medicare principles, hospital charges serve as the basis for reimbursement. Hospitals are reimbursed for most outpatient services at charge or at reported allowable cost, whichever is lower. Reported allowable costs refer to categories of cost, such as the labor and supplies required to treat a patient, which Medicare is willing to reimburse for its patients. The following examples illustrate Virginia Medicaid's payment policy in practice:

> *In fiscal year (FY) 1990, a hospital had $197,755 in reported allowable costs for outpatient services. Total charges made by the hospital were $354,458. The hospital was reimbursed $197,755, or its reported allowable costs.*
>
> * * *
>
> *In the same fiscal year, another hospital had $6,075,535 in reported allowable costs for outpatient services. Total charges, however, were less. They were $5,374,737 — a difference of $700,798. Therefore, the hospital was reimbursed its charges by Virginia Medicaid.*

Some outpatient hospital services are reimbursed on a fee-for-service basis. For example, all claims for non-emergency services delivered in an emergency room are reimbursed at $30. This policy was implemented by DMAS beginning in FY 1992. According to the DMAS director, this policy was implemented to control inappropriate use of emergency rooms, thereby containing program costs.

In recent years, federal changes have been made to Medicare's outpatient reimbursement system. DMAS has adopted some of these policies for Virginia Medicaid, and rejected others. For example, starting in FY 1990, a 5.8 percent reduction was applied to hospital outpatient operating costs by Medicare. DMAS implemented this policy for Virginia Medicaid. However, Medicare also decided to recognize the special needs of rural primary care hospitals and sole community provider hospitals by exempting them from the 5.8 percent reduction. DMAS did not adopt this exemption policy for Virginia Medicaid.

In addition to the Medicare principles of reimbursement, certain broader federal requirements also apply to outpatient hospital reimbursement. In order to maintain reasonable access, outpatient hospital payments must be sufficient to enlist enough providers so that services under the plan are available to recipients at least to the

extent that those services are available to the general population. Also, federal matching funds are not available for any outpatient hospital payment that exceeds the amount that would be payable by Medicare under comparable circumstances. This restriction, in effect, sets an upper limit on outpatient hospital reimbursement.

The federal requirement (the Boren Amendment) that rates must be reasonable and adequate to meet the costs that must be incurred by efficiently and economically operated providers applies to inpatient hospital services, but not outpatient hospital services. It should also be noted that there are no federal requirements to supplement outpatient reimbursement rates with disproportionate share adjustments.

PERFORMANCE OF THE OUTPATIENT REIMBURSEMENT SYSTEM

JLARC staff analysis indicates that Virginia Medicaid's outpatient hospital reimbursement rates have been sufficient to provide access to quality care. However, there is concern that retrospective, cost-based reimbursement does not adequately encourage cost-effective delivery of services.

Outpatient Reimbursement Rates Appear Sufficient

The sufficiency of reimbursement rates was evaluated from two perspectives. One perspective is whether Medicaid clients have access to quality care. The second perspective is the impact of Medicaid reimbursement on providers.

Access to Services Has Not Been a Problem. Outpatient hospital reimbursement rates have been sufficient to enlist a broad base of hospital providers. As noted in Chapter II, all of Virginia's 97 acute care hospitals participate in Virginia Medicaid. Ninety-five of Virginia's acute care hospitals provided outpatient hospital services to Virginia Medicaid clients during FY 1990. All of these hospitals met the State's quality standards for licensure and/or the quality standards of the Joint Commission on Accreditation of Healthcare Organizations.

While outpatient hospital providers are located throughout the State, the majority of service is provided by large urban hospitals (Appendix D). In FY 1990, ten hospitals accounted for 51 percent of Medicaid outpatient hospital spending. The top ten providers were all urban and non-profit and tended to be among the larger hospitals in the State. Of the top ten, eight were located in health service areas (HSAs) IV and V, which are the Richmond, Southside, and Tidewater areas of the State. The State's two teaching hospitals alone consumed 28 percent of Medicaid spending for outpatient hospital services in FY 1990.

In interviews, neither site visit hospital staff nor staff of the Virginia Hospital Association (VHA) indicated that outpatient payment rates in general were insufficient to secure access to outpatient hospital services. However, administrators from some site

visit hospitals did express concern about the DMAS policy of paying a $30 fee for non-emergency visits to hospital emergency rooms. They suggested that inappropriate utilization of emergency room services was a symptom of a lack of access to primary care, a problem over which the hospitals have little control. Medicaid reimbursement for primary care physicians and issues related to access to care are evaluated in the JLARC report on Medicaid ambulatory care.

Medicaid Outpatient Payments a Minor Source of Hospital Revenue. Although outpatient services are of increasing importance to hospitals, Medicaid outpatient revenues remain a relatively minor source of net patient revenues for most (Appendix D). In FY 1990, Medicaid outpatient payments represented less than 1.3 percent of net patient revenues for 83 hospitals and hospital systems for which data were available. The highest percentage was 12.7 percent. Of the ten hospitals receiving the largest proportion of net patient revenue from Medicaid outpatient payments, five are in HSA V (Tidewater).

Neither staff from site visit hospitals nor the VHA expressed major concerns about Medicaid outpatient reimbursement levels. Unlike inpatient reimbursement, there is not a growing gap between reported allowable costs and Medicaid reimbursement in the outpatient setting. As noted earlier, Medicaid outpatient reimbursement is based on the lower of hospital costs and charges, with some exceptions. As a result, hospitals tend to receive reimbursement commensurate with their reported allowable costs of providing outpatient service.

Outpatient Reimbursement Rates Could Be More Cost Effective

Medicaid spending for outpatient hospital services is a growing concern. Aggregate spending for hospital outpatient services has increased at a greater rate than Medicaid spending as a whole, so that outpatient hospital services now represent seven percent of the Medicaid budget for medical services. Furthermore, DMAS has forecasted substantial growth in hospital outpatient expenditures through FY 1994. These trends raise questions as to whether the cost-based reimbursement system encourages cost-effective delivery of care.

Two important factors contributing to the growth in outpatient spending are pressures to contain inpatient hospital costs and the development of new technologies for providing service in alternate settings. These factors have encouraged hospitals to shift services to the outpatient setting, thereby increasing the volume of outpatient services for most patient groups.

An additional factor is that cost-based reimbursement does not provide incentives for hospitals to constrain the volume and intensity of outpatient services. Cost-based reimbursement was a major cause of inpatient hospital cost inflation during the 1970s for the same reason. Under cost-based reimbursement, providers do not have the same incentive to be efficient because nearly all of their resource costs will be reimbursed. Higher costs result in higher payments, and lower costs simply result in lower payments.

DMAS has taken steps to encourage providers to contain service costs. These include the following:

- In keeping with a Medicare policy change, reimbursable outpatient operating costs were reduced by 5.8% beginning in FY 1990. DMAS estimated the associated cost avoidances at $1.2 million (general funds) for the 1990-1992 biennium.

- Also in keeping with Medicare, reimbursement rates beginning in FY 1990 for capital-related costs were reduced. DMAS estimated the associated cost avoidances at $480,000 (general funds) for the 1990-1992 biennium.

- DMAS has reduced payments to hospitals for emergency room services that are not emergencies. DMAS estimated the FY 1992 cost avoidances at $2.2 million (general funds).

While these actions have increased the cost effectiveness of outpatient hospital spending, additional changes should be considered.

CONSIDERATIONS FOR OUTPATIENT REIMBURSEMENT REFORM

In response to concerns about the cost effectiveness of cost-based reimbursement, ProPAC has recommended that Medicare adopt a prospective outpatient reimbursement system. Virginia Medicaid should also move toward prospective reimbursement for hospital outpatient services, with the objective of avoiding unnecessary spending increases in the future while maintaining access to quality care.

There are at least two major considerations related to the development of a prospective reimbursement system. First, if Medicare does not adopt prospective payment for outpatient hospital services, then Virginia will be faced with the prospect of developing its own system. In this case, Virginia may look to the ProPAC proposal and to other states for models. Second, changes to outpatient hospital reimbursement should be coordinated with inpatient reimbursement policy because of: (1) the hospital settlement agreement, (2) the need to recognize the impact of total reimbursement on providers, and (3) the need to provide consistent incentives.

There Are Several Prospective Reimbursement Options

Although prospective reimbursement may be a desirable option, the development of a new reimbursement system can be a complex task. If a decision were made to implement a prospective system, Virginia could opt to continue to follow Medicare reimbursement principles if Medicare adopts prospective reimbursement. Or, Virginia could develop its own system, with the option of drawing on ideas from other states.

ProPAC Has Made Recommendations for Medicare. ProPAC's approach to reimbursement reform is designed to limit the volume of services and the cost per unit of service. The volume of services would be controlled by bundling related services together for payment. For instance, instead of paying for individual services, Medicare would pay for packages of services which might be grouped by time period (for example, services provided in a month), episode of care (for instance, treatment of a fracture), or some other grouping category. The basis for this type of system is that because payments would not be made for each individual service, there would be an incentive to eliminate unnecessary services. (ProPAC also points out the need for enhanced quality control to ensure that appropriate services are not eliminated.)

The cost per unit of service would be controlled by using prospective payment rates. Payment levels would be based on average hospital costs. The idea is that payments to high-cost hospitals would be held to the average, while low-cost hospitals would be rewarded with payments that exceed their costs. The base rates would be updated annually using an appropriate update factor. The use of an update factor would allow control over the amount of inflation in the cost of bundled services. Payment adjustments would be instituted to recognize factors beyond a hospital's control which create legitimate differences in costs among providers. These factors might include labor costs, case mix, teaching status, indigent care load, and emergency room utilization.

There are a number of practical obstacles to the implementation of the reimbursement system envisioned by ProPAC. For example, there is a lack of a proven classification system for bundling outpatient hospital services for payment. There are also concerns about the accuracy of Medicare cost reports for determining the true resource costs of outpatient hospital services. In addition, data limitations make it difficult to consider the impact of labor costs, case mix, and other factors on hospital costs.

With these limitations in mind, ProPAC has recommended an incremental strategy for payment reform. ProPAC believes that the ultimate goal should be to implement prospective payment for all outpatient services, with adjustments to reflect justifiable cost differences among providers. This goal will require further research to develop an appropriate classification system for bundling ambulatory services. In ProPAC's view, this classification system should apply to hospitals and free-standing outpatient facilities.

In the interim, ProPAC has recommended that payments for ambulatory surgery and radiology services performed in the hospital outpatient setting should be fully prospective based on national rates adjusted for area wage differences. The rates should be updated annually using an appropriate update factor.

ProPAC has made other, more technical recommendations as well. The prospects for implementation of ProPAC's recommendations are currently uncertain. According to staff at ProPAC, Congress will not act upon these recommendations until the spring of 1993 at the earliest.

Other States Have Adopted Prospective Payment Systems. Other states use a variety of outpatient hospital reimbursement systems. The majority of states operate like Virginia in that their outpatient reimbursement systems are based on hospital charges and reported allowable costs. Also like Virginia, 21 other states use a combination of payment methods for outpatient services. For example, 11 states use charge-based reimbursement for some outpatient services and fee-for-service for others.

According to Congressional Research Service information, eight states were using some form of prospective payment for outpatient reimbursement during FY 1987. By 1992, 13 states were using prospective payment. These systems are diverse in design. For example,

> *In Maryland, rates for outpatient services are set by the state's Health Services Cost Review Commission. If the Commission has not set rates for a particular outpatient service then the lower of reasonable cost or charge is used to reimburse the provider.*
>
> * * *
>
> *In South Carolina, a prospective payment rate is based on Medicare outpatient service rates. Surgical and nonsurgical outpatient procedures are reimbursed using an all-inclusive fee for the service.*

A summary of the systems used in other states is contained in Appendix H.

Outpatient Reform Should Be Coordinated with Inpatient Reimbursement Reform

Outpatient reimbursement reform should be coordinated with inpatient hospital reimbursement policy for three primary reasons. First, although the outpatient reimbursement system was not the target of litigation in the Virginia Hospital Association lawsuit, it is nonetheless subject to the restrictions imposed by the settlement agreement. In effect, the settlement agreement provides that FY 1997 will be the Commonwealth's first opportunity to implement cost-saving changes in outpatient hospital reimbursement.

Second, inpatient and outpatient reimbursement should be mutually considered for their combined impact on individual hospitals. As noted in Chapter IV, the General Assembly may need to make policy choices about the treatment of the State teaching hospitals and certain rural hospitals under a revised inpatient reimbursement system. These same policy choices should be considered in revising outpatient hospital reimbursement.

Third, inpatient and outpatient reimbursement policy should be coordinated to provide consistent incentives for cost-effective delivery of services. In the early days of prospective payment, Virginia Medicaid and other payors were content to pay for

outpatient services using retrospective, cost-based methods. At the time, this policy served the purpose of encouraging hospitals to move procedures to the outpatient setting.

Now that this transition has taken place, it is important to keep inpatient and outpatient reimbursement in balance. For example, while the outpatient reimbursement system may need to be more cost effective, revisions to outpatient reimbursement should not cause hospitals to shift costs back to the inpatient setting. To avoid this situation, inpatient and outpatient reimbursement should be viewed as two parts of the same whole. Outpatient reimbursement policy proposals should be studied carefully to identify the potential for creating adverse incentives which could undermine the cost effectiveness of Medicaid inpatient hospital reimbursement.

Recommendation (12). **The Department of Medical Assistance Services should implement a prospective reimbursement system for Medicaid outpatient hospital services as soon as the hospital settlement agreement will permit. DMAS should review alternative systems, including that which has been proposed for Medicare as well as those in operation in other states, and make recommendations to the General Assembly prior to implementing a new system.**

VI. Cost Settlement and Audit

The last two chapters have addressed the rate setting aspect of Medicaid hospital reimbursement. Another important aspect of the reimbursement system is cost settlement and audit (CSA). CSA serves as a financial control mechanism. Financial control is necessary to ensure that the Commonwealth pays only for those costs explicitly allowed under the established rates and principles of reimbursement. Financial controls are also necessary to ensure the reliability of a hospital's financial information. In the absence of these controls, the Commonwealth could spend more general funds than necessary on Medicaid hospital services.

Generally speaking, CSA is the process used by the Department of Medical Assistance Services (DMAS) to examine a hospital's annual reported costs and to determine those costs which will be considered for reimbursement by the Medicaid program. DMAS uses the process to determine the amount of funds still owed to a hospital by the Medicaid program, or vice versa, at the end of a fiscal year (FY). The CSA process is also used to determine hospital reimbursement rates for the next fiscal year.

Senate Joint Resolution 180 (1991) requested that JLARC examine the interpretation of federal requirements to determine if they had been implemented in the most effective and least costly manner. This JLARC review of the cost settlement and audit process found instances in which DMAS did not appear to interpret federal regulations in the most cost-effective manner prior to FY 1988. The result was that at least six hospitals may have been overreimbursed by as much as $578,000 in State general funds. Additional overreimbursements may have occurred since FY 1983. However, because of difficulty in accessing earlier hospital cost settlement files, JLARC staff could not determine the full extent of the overreimbursement nor its collectability.

Therefore, DMAS should examine all hospital cost settlements for fiscal years 1983 through 1987. From this examination, DMAS should determine which hospitals were overreimbursed during each fiscal year. Then, DMAS should determine the collectability of all overreimbursements.

This is not the first JLARC review of the cost settlement and audit process. It was also evaluated as part of the 1979 study of inpatient care. The process used by DMAS today was compared to that in place in 1979. While the process has improved since that time, improvements could still be made in three areas. First, the timeline for settling with hospitals and setting new reimbursement rates should be expedited as much as possible.

Second, DMAS could strengthen the field audit process for hospitals. Currently, few hospitals are field audited and, as a result, the State may be spending more Medicaid funds than necessary. Third, DMAS should improve its record-keeping practices. As the State prepares for the possibility of reimbursement reform, it is important to maintain an accurate, audited store of data on hospital operating costs.

OVERVIEW OF THE COST SETTLEMENT AND AUDIT PROCESS

All hospitals are required to maintain cost accounting records for the Medicaid program and to submit these records annually to DMAS using standard cost report forms. From the cost report, DMAS determines each hospital's reported allowable inpatient and outpatient costs. This determination and the resulting actions comprise the cost settlement and audit process. The process is based on the Medicare principles of reimbursement for outpatient hospital services, and the State's Medicaid principles of reimbursement for inpatient hospital services.

The cost settlement and audit process can be divided into three stages (Figure 23). The first stage is the receipt of the hospital cost report by DMAS and the resulting tentative settlement and interim rate setting. The second stage is the desk audits of the hospital cost report and the resulting cost settlements and rate setting. The third stage is the field audit and final settlements.

Tentative Settlement and Interim Rate Setting

Once a hospital submits all the necessary cost report forms to DMAS, DMAS internal policy is to establish an interim rate for inpatient reimbursement for the upcoming year and to tentatively settle with the hospital for the year just ended. If the hospital owes the Medicaid program money because of overreimbursement throughout the year, the amount owed is submitted to DMAS with the cost report. If DMAS owes the hospital money, a check is written and sent to the hospital. Until recently, the tentative settlement and interim rate setting was to occur within 90 days after DMAS received an acceptable hospital cost report according to Division of Cost Settlement and Audit staff. Effective August 3, 1992, DMAS adopted emergency regulations for the nursing home payment system which will require that the tentative settlement and interim rate setting occur within 180 days after the receipt of an acceptable cost report. Although there has been no public regulatory change for hospitals, DMAS staff stated that the 180-day timeline will also be applied to hospitals.

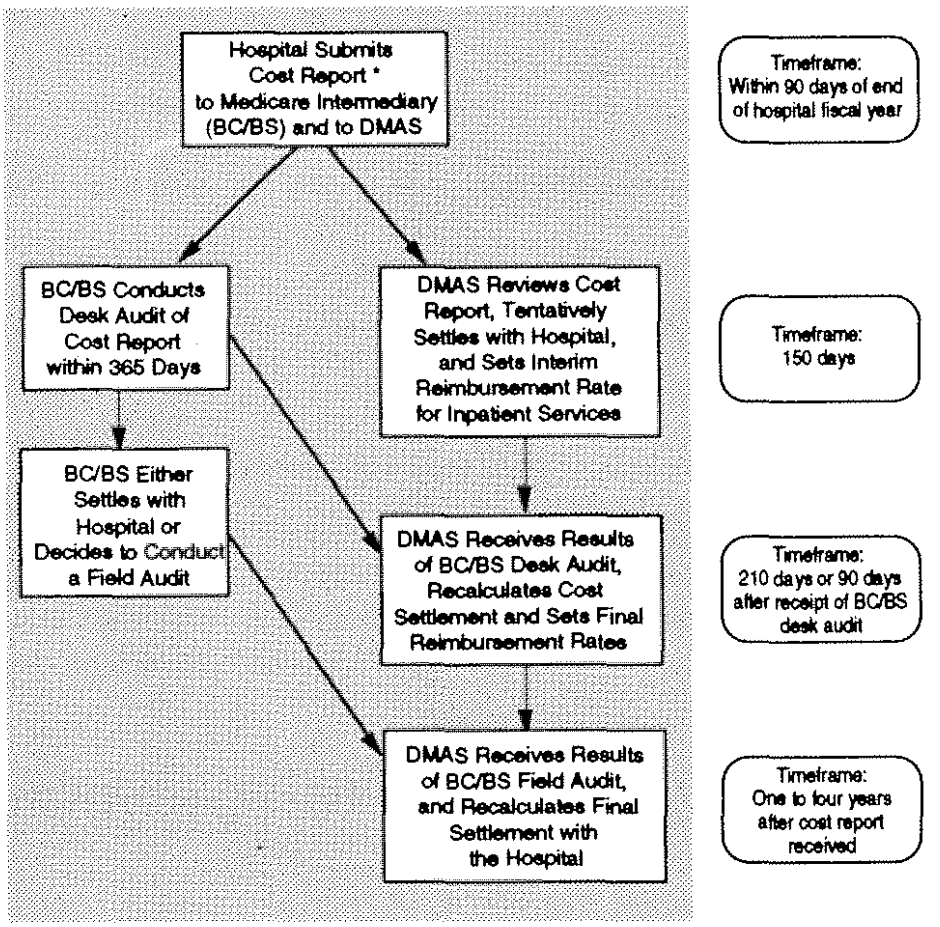
Desk Audits of Hospital Cost Reports

Because most of the same basic principles of reimbursement are used, Medicare cost reports are used to determine most Medicaid hospital allowable costs. This occurs at a relatively low cost ($40 per cost report) through a common audit agreement with the Medicare Intermediary — Blue Cross/Blue Shield of Virginia (BC/BS). DMAS waits for BC/BS to complete its desk audit of the Medicare cost report before conducting a desk audit of the hospital's Medicaid cost report. BC/BS has one year in which to complete the desk audit or to decide to conduct a field audit of the hospital cost report.

The BC/BS desk audit consists of a mathematical check of the cost report and a comparison of the current cost report to the previous year's cost report. During the desk audit, BC/BS staff focus their attention on particular areas of the cost report including

Figure 23

Hospital Cost Settlement and Audit Process as of July 1992



*Cost report includes the HCFA 2552 forms, which are Medicare specific, and the MAP 783 forms, which are Medicaid specific.

Source: JLARC staff analysis.

capital, pass-through medical education, and bad debts. Attention is focused in these areas because of Medicare policy decisions.

Once the results of the BC/BS desk audit of Medicare costs are received by DMAS, they are applied to the Medicaid cost report. According to staff, DMAS focuses its desk audit on pass-through costs including capital and direct medical education. Once this audit work is complete, DMAS staff determine the following for each hospital:

- allowable inpatient costs,
- allowable outpatient costs,

- the amount of money the hospital has already been reimbursed by the Medicaid program for the fiscal year,

- the difference between amounts owed to the hospital and amounts paid to the hospitals,

- the prospective per diem rate for inpatient services for the upcoming year, and

- the percentage of outpatient charges that will be reimbursed for the upcoming year.

At this time, DMAS "cost settles" the cost report with the hospital. Under internal standards set by DMAS, the desk audit and resulting rate setting and cost settlement is to occur within 210 days after DMAS's receipt of the hospital's cost report or within 90 days after receipt of the BC/BS desk audit results, whichever is later.

During this review, JLARC staff examined the FY 1988 through FY 1991 cost reports for the ten site visit hospitals, the Medical College of Virginia Hospitals, and the University of Virginia Medical Center. For the 40 cost reports that had been completed at the time of the review, almost $1.2 million was saved from the BC/BS and DMAS desk audits of the cost reports.

Field Audit of Hospital Cost Report

DMAS does not typically conduct field audits of hospitals. In September of 1992 DMAS field audit staff began a field audit of one hospital. According to DMAS staff, this was the second field audit of a hospital that has been conducted by DMAS staff since before the implementation of inpatient prospective payment rates in 1982.

Rather than conducting its own field audits, DMAS has relied on BC/BS to conduct fields audits under a common audit agreement. According to BC/BS staff, BC/BS only audits hospitals that are Medicare certified and focuses on hospitals with high Medicare utilization. According to information provided by BC/BS, eight of the 97 acute care hospitals in Virginia are not Medicare-certified or auditable by BC/BS. While some of the eight hospitals may be field audited by an out-of-state Medicare intermediary, DMAS does not have common audit agreements with these entities.

For hospitals that can be field audited by BC/BS, a field audit may not occur for several years after the end of the hospital's fiscal year. After the field audit, additional adjustments may be necessary to both the Medicare and Medicaid cost report. These additional adjustments occur as a final settlement. However, there may be more than one final settlement because BC/BS and DMAS reserve the right for three years to re-open a cost report that has been final settled.

OVERREIMBURSEMENT OF HOSPITALS

Since the 1970s, reimbursement for the Medicaid and Medicare programs has been based on the principle that a hospital should be reimbursed either for reasonable costs or for the customary charge of its services, whichever is lower. This principle is known as the lower of cost or charges (LCC) rule.

Prior to 1982, inpatient and outpatient services were reimbursed retrospectively by Virginia Medicaid. At that time, the LCC rule was applied to total hospital reimbursement (inpatient plus outpatient) because the two reimbursement systems were essentially the same. According to staff of the U.S. Health Care Financing Administration (HCFA), when reimbursement for inpatient hospital services became a prospective per diem system, the LCC rule could have been applied separately to inpatient and to outpatient reimbursement by DMAS. This interpretation was supported by JLARC staff analysis of federal laws and regulations.

According to DMAS staff, from FY 1983 through FY 1987, DMAS applied the LCC rule to hospital reimbursement at the aggregate level — by totalling inpatient and outpatient costs and charges. Therefore, the following situation with a hospital could occur:

A hospital's annual cost report could show the following information:

Inpatient	*Outpatient*	*Total*
$130,000 in charges	*$50,000 in charges*	*$180,000 in charges*
$100,000 in costs	*$70,000 in costs*	*$170,000 in costs*

By applying the LCC rule in the aggregate as DMAS did, the hospital would be reimbursed $170,000 or its combined inpatient and outpatient costs because this amount is lower than total charges.

If the LCC rule had been applied to outpatient and inpatient services separately, the hospital would have been reimbursed $150,000 — $100,00 in inpatient costs plus $50,000 in outpatient charges.

As a result of applying the LCC rule in the aggregate, the hospital would have been overreimbursed by $20,000.

During a review of DMAS automated records and cost reports, JLARC staff found evidence that six hospitals may have been overreimbursed by as much as $1.2

million (approximately $578,000 in State general funds) for services provided in FY 1986 and FY 1987. This overreimbursement occurred because the LCC rule was not applied separately to inpatient and outpatient reimbursement.

The total amount of overreimbursement which may have occurred between FY 1983 and FY 1987 could not be fully determined by JLARC staff because the cost report and cost settlement information prior to FY 1987 was not readily available. DMAS staff stated that the necessary files were stored in an off-site location. Further, DMAS staff stated that the content of the files may not be uniformly organized. Because of these concerns, it was determined that there would not be enough time for JLARC staff to complete a comprehensive review during the timeframe of this study.

The collectability of overreimbursements depends in part on whether a final cost settlement has been reached for the hospitals and years in question. Federal laws require that collection of overpayments must be initiated within three years of the date of the final settlement. There is no guidance for when the collection must be completed. JLARC staff attempted to determine final settlement dates for 12 hospitals with little success because it was difficult to determine the date of final settlement. For instance:

> *A review of a hospital cost settlement file for FY 1988 indicated that a final settlement was reached in 1992 for the FY 1988 cost report. However, documentation leading up to this final settlement was missing from the cost report file. According to DMAS staff, the missing documentation was in a correspondence file that JLARC staff were not previously informed of during the file review.*
>
> *Further, a 1991 letter sent to the hospital stated that the "final" settlement was being made at that time. But the opening salutation to the same letter indicated that it was notifying the hospital of an "interim" settlement indicating confusion over the purpose of the letter and whether the cost report was actually "final settled."*

Therefore, just as in determining possible overreimbursements, DMAS staff should also determine how much of the overreimbursements can be collected.

Recommendation (13). **The Department of Medical Assistance Services should immediately begin an examination of all hospital cost reports and cost settlements for fiscal years 1985 through 1987 to determine: (1) which hospitals may have been overreimbursed, (2) the amount of overreimbursement, and (3) the costs and benefits of collecting overreimbursements. If it is determined to be cost-effective to collect overreimbursements from fiscal years 1985 through 1987, then the Department should examine all hospital cost reports and cost settlements from fiscal years 1983 and 1984 to determine the amounts and collectability of any reimbursements from those years. The Department should report its findings to the General Assembly by March 31, 1993.**

IMPROVEMENTS TO THE COST SETTLEMENT AND AUDIT PROCESS

In 1979, JLARC examined the cost settlement and audit process as part of its study of inpatient care in Virginia. Since that time, improvements have been made to the process. For example, the process is now mostly automated.

In 1992, however, some of the same CSA concerns were still apparent (Exhibit 2). Two areas in particular need to be improved. First, DMAS should take steps to expedite the timeline for the cost settlement process. DMAS has taken some steps to shorten this process, but additional work may be needed. Further, a recent regulatory change could lengthen the timeframe for setting an interim inpatient per diem rate and tentatively settling with hospitals for the previous fiscal year.

Exhibit 2

JLARC Concerns About the Cost Settlement and Audit Process

1979 Study Issue	1992 Study Findings	Further Action Needed
Processing of cost settlements excessively long.	Cost settlement processing could be shortened.	Yes
Hospitals frequently submit erroneous cost reports.	Hospitals now typically submit cost reports electronically.	No
Changes in reimbursement resulting from desk audit were often significant.	Changes in reimbursement resulting from desk audit were often significant.	No
A more systematic method of field audit selection should be employed.	Selection process is not in the control of DMAS.	Yes
Large Medicaid providers are not regularly audited.	Large Medicaid providers are not regularly audited.	Yes
Most Medicare audits are of limited scope.	Most Medicare audits are of limited scope and financially significant overreimbursements may not be discovered.	Yes

Source: JLARC staff analysis.

Second, DMAS should strengthen the field audit process for hospitals, particularly as the State begins Medicaid hospital reimbursement reform. Currently, the Medicare Intermediary (BC/BS) conducts limited field audits of hospitals. In 1987, DMAS examined field audit alternatives but made no changes to the current policy of relying on BC/BS field audits of Medicare cost reports.

Lastly, the cost settlement information available for examining hospitals costs needs to be improved. In addition, documentation in the cost settlement files could also be improved.

Timeliness of the CSA Process Could Be Improved

As discussed previously, the CSA process for a hospital can take years to complete. To a degree, DMAS has recognized that improvements are necessary. For example, the agency purchased the computer software necessary to conduct its own mathematical checks of the Medicare cost report beginning in the late Fall of FY 1993. Using this software, DMAS should be able to conduct desk audits without having to wait for Medicare information from BC/BS.

However, whether this change will shorten the CSA time frame is questionable. An analysis of DMAS settlement data for cost reports received during FY 1990 indicated that DMAS, on average, settled with hospitals nine months after the BC/BS math-checked cost report was received (Table 4). DMAS policy at that time was that this settlement would occur within three months. The FY 1991 Auditor of Public Accounts (APA) audit also found that cost reports were not settled in a timely manner.

Table 4

Time Frame Analysis of CSA Process

Cost Settlement Step	Number of Hospitals Step Completed For*	Average Length of Time to Complete Step**
1. Tentative Settlement	35	3.7 months
2. Cost Settlement	63	9.1 months
3. Final Settlement	8	3.7 months

*Total number of hospitals was 132. However, information on step dates was missing from database or step was not completed.

**Average length of time was computed from the date necessary settlement information was received by DMAS.

Source: JLARC staff analysis of FY 1990 DMAS cost settlement time frame data, May 6, 1992.

DMAS also recently changed its regulations to lengthen the timeframe for setting the interim per diem reimbursement rate for inpatient services for the upcoming fiscal year. This wait can result in larger cost settlements because the present timeline results in many hospitals being reimbursed under the past year's peer group ceiling for most of the current fiscal year. For example,

> *For one site visit hospital, the operating cost per diem in FY 1990 was $267.21. This amount was the peer group ceiling for that hospital. For FY 1991, the operating ceiling per diem increased to $279.07.*
>
> *For FY 1990, DMAS did not tentatively settle with the hospital. Cost settlement with the hospital occurred eight months after the hospital's fiscal year end. Therefore, inpatient hospital days for the first eight months of the new fiscal year were reimbursed at the lower FY 1990 rate.*
>
> *Based on FY 1990 Medicaid utilization information, the hospital could have been underreimbursed more than $35,000 in these first eight months of FY 1991.*

This situation occurred under the previous 90-day interim rate policy. During interviews with site visit hospital administrators, particularly those of small hospitals with high Medicaid utilization, concerns were expressed about the impact the cost settlement timeframe had on hospital cash flow. The August 1992 revision will lengthen the 90-day timeframe to 180 days.

Further, DMAS staff have stated that a significant portion of the $13.4 million in additional payments made to hospitals during the FY 1991 cost settlement process were retroactive cash payments for the current fiscal year. These payments resulted from the length of time it took DMAS to set the per diem rate.

Recommendation (14). **The Department of Medical Assistance Services should take steps to expedite the hospital cost settlement and audit process. In addition, DMAS should reconsider the recent regulatory change that lengthens the timeframe for setting the interim inpatient reimbursement rate for hospitals.**

Field Audits of Hospital Cost Reports Should Be Increased

In 1979, JLARC reported that a more systematic method of selection should be employed for hospital field audits. Such a method has not been implemented in part because of the common audit agreement between Medicare and Medicaid established by the U.S. Secretary of Health and Human Services. Virginia's common audit agreement with Blue Cross/Blue Shield has been in place since 1982. However, DMAS still has the authority to expand the number and scope of these audits and should do so.

Current Field Audits are Limited in Number and Scope. According to DMAS staff, DMAS has conducted only two field audits of hospitals since 1982. One DMAS field audit was of an out-of-state hospital in 1990 while the other has just been initiated. One result of not conducting more field audits is that DMAS may not have a true picture of reported allowable operating costs for all hospitals. Current audits of hospital cost reports focus on pass-through costs and not operating costs. As the State considers hospital reimbursement reform, an accurate picture of hospital operating costs will be important.

Another result of the lack of Medicaid-specific fields audits is that hospitals with large Medicaid utilization may not be regularly audited. This occurs despite the possibility that audit adjustments may have a proportionately large impact on hospital reimbursement. For example:

> *According to BC/BS information provided to JLARC, three of the top five Virginia hospitals in terms of Medicaid inpatient utilization were not Medicare-certified or auditable in FY 1991. This means that the BC/BS Intermediary could not field audit them. According to DMAS cost settlement information, these three hospitals were reimbursed $10.9 million in FY 1990.*
>
> * * *
>
> *BC/BS cites Medicare utilization as one of the primary criteria for selecting a hospital for field audit. In FY 1991, 30 hospitals were selected for field audit by BC/BS. Only five hospitals that ranked in the top 30 in terms of Medicaid utilization were field audited by BC/BS in FY 1991.*

DMAS appears to have had some concerns about the field audit process in the mid-1980s. In 1987, an independent consultant evaluated hospital field audit alternatives for DMAS. The four suggested alternatives were as follows:

- *Alternative 1:* Maintain the status quo which was to continue the desk audit of all cost reports and to continue the common audit agreement with BC/BS.
- *Alternative 2:* Conduct field audits using DMAS audit staff or by contracting with independent audit firms.
- *Alternative 3:* Contract with BC/BS to perform audits of specific areas of Medicaid cost reports.
- *Alternative 4:* Coordinate audits with other State agencies.

DMAS decided to continue the status quo, Alternative 1, at that time. However, since that time, DMAS has considered conducting additional hospital field audits. As of September 3, 1992, DMAS staff stated that one Medicaid-specific field audit had been

initiated. DMAS staff stated during interviews that, historically, additional audits have not been conducted because their cost was more than the anticipated benefit. In addition, DMAS staff time has been devoted to responding to the Virginia Hospital Association lawsuit.

JLARC staff analysis indicates potential for significant cost savings from Medicaid field audits. Five of the 48 hospital cost reports reviewed by JLARC staff had been field audited by BC/BS. These field audits resulted in approximately $300,000 in additional Medicaid cost savings (Table 5).

Table 5

Medicaid Cost Savings from Selected Hospital Field Audits

	Total Reimbursement After Desk Audit	Total Reimbursement After Field Audit	Net Savings
1.	$ 607,575	$ 606,946	$ 629
2.	907,081	904,609	2,472
3.	1,126,997	1,112,794	14,203
4.	7,603,580	7,410,029	193,551
5.	9,875,594	9,786,590	89,004
		Total Savings	**$299,859**

Source: JLARC file review of hospital cost reports, April 1992.

A field audit may not necessarily lower a hospital's per diem payment below its peer group ceiling. However, additional field audits could also provide the State with a truer picture of operating costs in hospitals. As the State considers reimbursement reform, DMAS staff may have to estimate the costs of alternative reimbursement systems. In conducting such analyses, it will be important to have accurate data on the hospitals' reported costs. Additional auditing could help to ensure that such accurate information is available.

Potential Costs of Additional Field Audits. According to BC/BS, a field audit of a hospital the size of Medical College of Virginia Hospitals (MCVH) takes between 300 to 350 audit hours on average to complete. Audit hours can vary depending on the scope of the audit. The hourly cost of a field audit is approximately $45, plus travel and lodging. Therefore, an audit of a hospital the size of MCVH would cost approximately $15,000,

plus travel and lodging. A Medicare field audit of a similarly-sized hospital completed in FY 1992 resulted in more than $193,000 in Medicaid cost savings.

According to DMAS, the cost of DMAS audit staff conducting field audits is approximately $42 per hour. DMAS also currently contracts with private accounting firms to conduct nursing home field audits. These firms could also conduct hospital field audits. These firms vary their hourly charges based on the time of the year and staff involved in the audit.

Recommendation (15). **Prior to preparing the FY 1995 budget, the Department of Medical Assistance Services should complete an analysis outlining the costs and methodology for conducting additional field audits of hospital cost reports. This analysis should include an assessment of the costs and benefits of conducting these audits using DMAS staff, Medicare Intermediary staff, other contractors, or a combination of these sources.**

Improvements to CSA Record Keeping Are Needed

As part of this study, JLARC staff reviewed cost settlement files and automated records for analysis. JLARC staff reviewed 48 cost settlement files for FY 1988 through FY 1991. These files, particularly those for years before FY 1990, were not consistently organized or complete. For example:

> *Information collected during JLARC field reviews was compared to the Division of Cost Settlement and Audit's historical database for hospital costs and charges. This comparison found that DMAS staff did not use the same cost report information from year to year to develop the database.*
>
> *For one hospital, FY 1990 total outpatient services cost was taken from the "outpatient subtotal" category on the cost report. For FY 1989, the cost report category "outpatient ancillary services" was used for total outpatient services cost. Neither category accurately reflected the total outpatient reimbursement from the cost report.*
>
> * * *
>
> *JLARC staff questioned DMAS staff about cost report information for 17 hospitals from the database because the information appeared inaccurate. For all 17 hospitals, corrections to the cost data were necessary. In some cases, the corrections were necessary because revisions had been made to the cost report since the database was established. DMAS staff stated that the database only captures one point in time and is not routinely updated to accurately reflect current CSA data. However, DMAS staff also stated that this database was the best source of detailed hospital charge and cost information.*

In both FY 1990 and FY 1991, the Auditor of Public Accounts cited DMAS for the lack of CSA documentation in its annual financial audits. Further, the DMAS Internal Auditor in a January 1991 report stated that 67 percent of the sample cost report files reviewed by his staff did not contain documentation on how the cost settlement rate was derived.

Recommendation (16). **The Department of Medical Assistance Services should develop policies and procedures for automated cost settlement and audit record keeping. Included in these policies and procedures should be guidelines for updating the data as the process proceeds and for appropriate uses of the data.**

VII. Services, Co-Payments, and Utilization Review

Senate Joint Resolution (SJR) 180 (1991) directed JLARC to assess the cost savings and health policy implications of limiting the scope or duration of optional services or adjusting recipients' contributions to care. It also directed JLARC to determine the effectiveness of current utilization review procedures in controlling costs and to explore additional options. This chapter addresses these issues within the hospital setting.

As mentioned earlier in Chapter II, one way to control Medicaid hospital spending is by controlling the use of hospital services. Therefore, the State has tried to control costs by only offering optional services with limited fiscal impact; by limiting the amount, duration, and scope of hospital services; by requiring Medicaid recipients to share in the cost of hospital services; and by conducting utilization review of hospital services.

Compared to other states, the Virginia Medicaid program offers few optional hospital services and places strict limits on other hospital services. In addition, Virginia Medicaid's co-payment policy is one of the most demanding in the nation. Therefore, there is little room for additional cost containment through limiting services and adjusting co-payments without creating health policy implications that require thoughtful evaluation.

In order to help health policy decision-makers understand the impact of these limits, standard assessment criteria such as legislative intent should be used to examine any future limit before it is imposed. Further, the General Assembly should be involved in this decision-making process because of the potential impacts of any further limits.

Other than restricting actual services and their delivery, a powerful tool for controlling the cost of hospital services is utilization review. JLARC staff analysis indicates that Virginia Medicaid's existing utilization review program has achieved substantial cost avoidances for inpatient hospital services.

The utilization review program could be expanded to include more in-depth utilization review of hospital outpatient services, as well as targeted use of prospective utilization review. DMAS should also explore the potential of incorporating analysis of provider practice patterns into its utilization review activities. Finally, if Virginia does adopt payment reforms for Medicaid hospital services, it will be important to reassess Medicaid utilization review strategies to ensure that they are compatible with reimbursement changes.

HOSPITAL SERVICE LIMITATIONS AND CO-PAYMENTS

In order to assess the implications of restricting optional services, other hospital services, and co-payments, JLARC staff developed a standardized list of questions that addressed various aspects of State health policy and federal Medicaid requirements. These questions are as follows:

- Does the limit violate federal laws or regulations?
- Does the limit violate State laws?
- Does the limit contradict State policy?
- Does the limit contradict legislative intent?
- Is there an impact on other indigent care programs?
- Are there Medicaid cost savings?
- Is there a recipient impact?
- Is there a provider impact?
- Is there an administrative impact?
- Is there adequate data by which to accurately assess the impact of the limitation?
- Is the service widely available?
- How does the limit compare to that of other states?

After answering these questions for the optional hospital services that Virginia Medicaid covers, only one — inpatient hospital services for State mental institution patients at least 65 years old — appeared to have the potential for further containing costs (Exhibit 3).

Virginia Medicaid also imposes a number of limitations on the amount, duration, and scope of hospital services. For example, hospitals are only reimbursed for the first 21 days of an adult inpatient's stay. Lowering the 21-day length of stay for adult inpatients has the potential for creating additional cost savings for Virginia Medicaid. However, as shown in Exhibit 3, when assessed using the standardized questions, this reduction could result in serious health policy implications.

Virginia Medicaid recipients are also currently required to pay hospitals a $100 co-payment for inpatient hospital services. This co-payment, which was implemented in

Exhibit 3

Assessment of Health Policy Implications of Further Limits on Hospital Services

Health Policy Question	Limit Adult Inpatient Stay to Less Than 21 Days	Increase Co-Payment for Inpatient Stay	Eliminate Coverage of Mental Patients 65 or Older in State Institution
1. Does limit violate federal laws or regulations?	No	Potential	No
2. Does the limit violate State laws?	No	No	No
3. Does the limit contradict State policy?	No	No	No
4. Does the limit contradict legislative intent?	?	?	?
5. Is there an impact on other indigent care programs?	Yes	?	No
6. Are there Medicaid cost savings?	Yes	Yes	Limited
7. Is there a recipient impact?	?	Yes	?
8. Is there a provider impact?	Yes	Yes	Yes
9. Is there an administrative impact?	?	No	No
10. Is there adequate data by which to accurately assess the impact?	No	No	Yes
11. Is the service widely available?	?	?	?
12. How does the limit compare to that of other states?	Restrictive	Restrictive	Same

Source: JLARC staff analysis.

July of 1992, should result in substantial cost savings for the State. However, it also has implications for recipients for whom the co-payment is a significant portion of monthly income, as well as providers who have difficulty collecting the co-payment.

Coverage of Existing Optional Services Has Minimal Fiscal Impact

According to the U.S. Health Care Financing Administration, there are three optional inpatient hospital services that states can choose to include in their Medicaid programs. These services are:

- inpatient hospital services for patients 65 or older in State mental institutions,
- emergency hospital services at non-Medicaid enrolled hospitals, and
- inpatient psychiatric services for children under age 21.

The State includes inpatient hospital services for patients 65 or older in State mental institutions and emergency hospital services in non-enrolled hospitals in its Medicaid program coverage. Because all Virginia hospitals are enrolled in the Medicaid program, coverage of emergency services at non-participating hospitals is not an issue.

Including inpatient hospital services for patients 65 or older in State mental institutions has both a fiscal and health policy impact. Coverage of this optional service cost the Medicaid program approximately $125,000 for 40 recipients in fiscal year (FY) 1991 (Table 6). If the State chose to discontinue this optional service, this money could be saved. However, hospitals may have to assume the cost of providing services to this group because they would not be covered by any other State health care program, according to the Department of Medical Assistance Services (DMAS).

Table 6

Medicaid Inpatient Hospital Expenditures for Patients 65 or Older in Institutions for Mental Diseases FY 1990 and FY 1991

Fiscal Year	Maximum Number of Expenditures	Recipients
1990	$ 75,706	63
1991	$124,762	40

Source: JLARC staff analysis of Department of Medical Assistance Services claims data, April 20, 1992.

Legislative intent concerning the inclusion of this optional service has not been explicitly stated. However, legislative intent regarding other services to institutionalized citizens has been to use Medicaid funding to support them.

Some Limits on Amount, Duration, and Scope Have Health Policy Implications

In addition to a state choosing to cover any of the three optional inpatient services described previously, federal law allows a state to place limits on the amount, duration, and scope of hospital services. These limits, which can help to contain costs, are allowed as long as they are based on criteria such as medical necessity or utilization control procedures. For example, Virginia Medicaid does not reimburse hospitals for acupuncture services provided to Medicaid recipients because its medical necessity has not been definitely determined. The current limits on inpatient and outpatient services in Virginia are listed in Exhibit 4.

Virginia's Limits Are Restrictive in Comparison to Other States. Virginia Medicaid's limits on hospital services are relatively restrictive when compared to those of most other states. Appendix I includes a complete comparison of Virginia's hospital service limitations to those found in other states. Many states impose limits on hospital services that are similar to Virginia's, but the State's limits are stricter or more encompassing. For example:

> *Thirty-three other states' Medicaid programs reimburse hospitals for bone marrow transplants. Virginia does not.*
>
> * * *
>
> *Virginia limits inpatient lengths of stay to 21 days. Eight other states have a similar limit, five have a less restrictive limit, and 36 states do not impose any limit.*

During this review, the current 21-day length of stay limit raised the most concerns. Staff at nine of the ten site visit hospitals expressed strong concerns that this limit was too short; however, DMAS has recommended several times since 1982 that this limit be further reduced to 14 days.

Further Limits on Inpatient Length of Stay Would Have Health Policy Implications. Further reducing the 21-day length of stay limit on adult inpatient hospital stays has significant cost savings potential for Virginia Medicaid. DMAS projected in 1988 that the biennial general fund savings would be approximately $9.8 million if the length of stay limit was lowered to 14 days. DMAS also estimated that 93 percent of inpatient stays would still be reimbursed under this new limit.

Although Medicaid recipients technically become responsible for payment after the 21 days, hospitals typically absorb this cost. For example, in FY 1991, 147 Medicaid

Exhibit 4

Limits on the Amount, Duration, and Scope of Hospital Services by the Virginia Medicaid Program

- 21-day length of stay within a 60-day period for adults
- No alcohol and drug rehabilitation
- One pre-operative day unless more are medically justified
- No Friday or Saturday admissions unless medically justified
- Certain procedures, such as knee arthroscopy, have to be performed in the outpatient setting
- Semi-private room
- Psychiatric services limited to 26 sessions
- Only cornea and kidney transplants; require prior authorization
- Abortions limited to life-threatening situations
- No hysterectomies for sterilization purposes only
- Sterilizations for male adults only
- Prior authorization of elective procedures
- No routine physicals and immunizations except for EPSDT* patients
- No cosmetic surgery
- No experimental procedures
- No acupuncture

*EPSDT — early and periodic screening, diagnostic, and treatment

Source: State Plan Under Title XIX of the Social Security Act for Medical Assistance Services; Virginia Medicaid Program Hospital Manual; Virginia Medicaid Program Physician Manual; DMAS Memorandum, March 29, 1991; and interviews with DMAS staff, April - July 1992.

recipients in eight of the site visit hospitals exceeded the 21-day length of stay. This resulted in a total of 1,044 uncovered days. Hospital administrators reported that none of the recipients paid for these days of care. Using FY 1990 per diem payment rates, JLARC staff estimate that the non-reimbursement of these days cost the eight hospitals approximately $340,000 in Medicaid revenue. Therefore, further limiting reimbursable days to 14 would have an even greater financial impact on providers.

A further limit could also have implications for recipient access to care. Under the current limit, after 21 days, hospitals have a financial incentive to discharge Medicaid patients in the absence of another source of payment. Hypothetically, these discharges could occur before the patient is medically ready. If a further limitation was implemented, a more serious threat to access could occur if hospitals began discouraging physicians from admitting Medicaid recipients or withdrew from the program altogether.

Another concern is that Medicaid savings from length-of-stay limitations could be offset by expenditure increases for other State indigent care programs. For example, days not covered by Medicaid might be covered by the Indigent Care Trust Fund or indigent care appropriations to the State teaching hospitals. The extent to which this may be occurring will be examined in a separate JLARC report, depending on the availability of data for these programs.

A final concern is that DMAS does not appear to have had complete information with which to fully assess the impact of the 21-day limitation. Until recently, DMAS has not required hospitals to provide information on the days of inpatient care beyond the 21 days. Therefore, DMAS staff's 1988 estimate that 93 percent of inpatient days would be covered even if the limit was lowered to 14 days is not based on complete information. Rather it is based on hospital stays that are 21 days or less. Information on the full length of stay, including days beyond the 21st day, would be required to assess the full impact of imposing further limits on inpatient length of stay.

Co-Payment Requirement for Inpatient Hospital Services Is Stringent

The *Code of Federal Regulations* allows states to impose co-payments on Medicaid recipients for hospital services. The amount of the co-payment cannot be in excess of fifty percent of the provider payment for the first day of care. Co-payments cannot be required for emergency services. Federal regulations also prohibit co-payments from being collected from pregnant women or children. Virginia Medicaid's current $100 inpatient co-payment and $2 outpatient co-payment requirements are in compliance with these regulations.

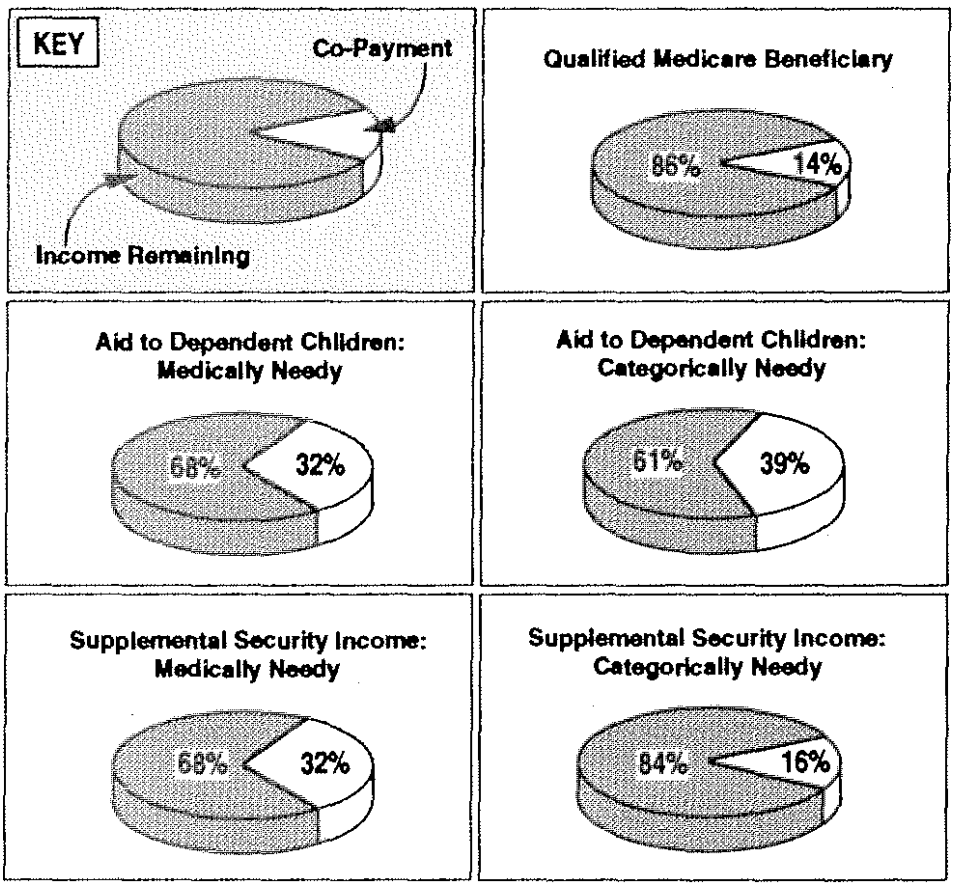
The $100 inpatient co-payment, which was implemented at the beginning of FY 1993, will result in cost savings for the State. If the co-payment had been required in FY 1991, it would have resulted in approximately $9.1 million in savings for Virginia Medicaid. This co-payment would have been required of the 91,000 Medicaid recipients who were discharged from hospitals in FY 1991.

Prior to the beginning of FY 1993 when the $100 co-payment for inpatient services went into effect, inpatient co-payments were $30 for each admission and only applied to medically needy Medicaid recipients. (Medically needy recipients are those that are eligible for Medicaid services but have excess countable income.) The $30 co-payment was comparable to those of other states. However, the $100 co-payment, which was mandated in the 1992 Appropriation Act, is higher than that imposed by 12 other states for which information could be obtained (Appendix I). Furthermore, this co-payment is required of both medically needy and categorically needy recipients.

One hundred dollars is a sizable portion of some Medicaid recipients' monthly income (Figure 24). For example, according to a May 1991 DMAS overview of Medicaid eligibility, $100 is 39 percent of the maximum allowable monthly income limit for a family

Figure 24

Co-Payment as a Percentage of the Monthly Income Limits for Medicaid Enrollees*



*Example provided is for a family of two living in the City of Richmond.

Source: JLARC staff analysis of *Medicaid Eligibility Overview*, May 16, 1991, DMAS.

of two living in the city of Richmond receiving Medicaid because they qualify for Aid to Dependent Children. Therefore, if actually collected, the co-payment can have a significant financial impact on Medicaid recipients.

On the other hand, the $100 co-payment may be a loss in revenue for the hospitals because staff from all the site visit hospitals expressed concerns about being able to collect it from Medicaid recipients. Eight site visit hospital finance directors reported that in FY 1991 the hospitals collected on average less than one percent of the $30 inpatient co-payment. In FY 1991, the Medical College of Virginia Hospitals collected $250,000 of the $4 million in co-payments it was owed.

The existing $100 co-payment has the potential for having a significant impact on recipients and providers. An increase in the co-payment amount would exacerbate this impact. Furthermore, a substantial increase in the co-payment amount could be in violation of federal regulations. Federal regulations require that the amount of the co-payment cannot be in excess of 50 percent of the first day of care. According to DMAS staff, the lowest per diem rate paid to an acute care hospital in FY 1991 was $279.07, meaning that a co-payment could not have exceeded $139 during that year.

There is a Need for Standard Assessment of Limits

In conclusion, as the previous examples indicate, hospital service limitations have resulted in modest coverage by the Medicaid program. When consideration is being given to imposing additional limits, all of the health policy implications of imposing the limit should be assessed. The questions shown in Exhibit 3 are a starting point for this assessment. Further, because additional limitations could have significant health policy implications which may extend beyond Virginia Medicaid, the General Assembly should be involved in this decision-making process. Therefore, the information that results from this standard assessment should be provided to the General Assembly so that the complete impact can be considered.

Recommendation (17). **The Department of Medical Assistance Services should ensure that both the executive and legislative entities involved in health policy decision making are involved in any future proposals for service or co-payment policy changes. In addition, DMAS should address each of the following issues in its proposals to the General Assembly for changes in service or co-payment policies: (1) consistency with federal laws and regulations, (2) consistency with State laws and policies, (3) consistency with State legislative intent, (4) fiscal impact on Medicaid and other indigent care programs, (5) recipient impact, (6) provider impact, (7) administrative impact, (8) adequacy of data with which to assess the impact of the policy proposal, (9) the availability of the service within the State (in the case of service changes), and (10) policies of other states.**

HOSPITAL UTILIZATION REVIEW

As cost containment has become more important to both hospitals and Virginia Medicaid, utilization review of hospital services has assumed a prominent role. Third party payors and hospitals use utilization review to determine which services are being provided to what patients, whether the services were necessary, and if the hospital should discontinue or change the service. For Virginia Medicaid, hospital utilization review of inpatient services has resulted in substantial cost avoidances and has served as an educational tool. While the current Medicaid hospital utilization review program can be considered effective in controlling costs, there are additional options that should be considered.

Current Utilization Review Activities Have Resulted in Cost Savings

Utilization review involves examining of each patient's medical record from an inpatient hospital stay and comparing it to established criteria. The comparison determines whether the entire stay was necessary. Utilization review is conducted by hospital staff, DMAS staff, and other third party payors.

Hospital utilization review can occur at three points in a patient's stay. First, the patient's admission to the hospital can be reviewed prior to the actual admission (prospective review or pre-certification). Second, the patient's care can be monitored throughout the stay (concurrent review) or third, the patients's care and the medical necessity of that care can be reviewed after the patient has been discharged (retrospective review).

Current DMAS Activities. Since 1982, the Virginia Medicaid hospital utilization review program has included both concurrent and retrospective reviews of inpatient hospital services. DMAS delegates concurrent review responsibilities to the hospitals, while DMAS staff complete the retrospective reviews. Retrospective review has two components. One includes the review of hospital claims and the medical necessity of the services provided prior to their payment. The other is a computerized comparison of a hospital's claims against those of similar hospitals. (The computerized comparison of hospitals is conducted as part of a larger DMAS program compliance program. The effectiveness of this program will be reviewed as part of a separate JLARC report on the management of the Medicaid program.)

Through the retrospective review of hospital claims prior to payment, DMAS has achieved significant cost avoidance (Table 7). For FY 1987 through FY 1991, DMAS reported that approximately $43 million in costs were avoided. In addition, utilization review serves as an educational tool. For example:

> *A hospital submits a claim to be reimbursed for a hysterectomy. When the DMAS utilization review analyst reviews the claim, it does not include the specialty forms that are required by DMAS. The DMAS*

Table 7

Cost Avoidances Attributed to DMAS Hospital Utilization Review Activities

Fiscal Year	Number of Days Reviewed	Number of Days Denied	Amount of Funds Saved
1987	193,632	19,955	$7,299,718
1988	229,247	19,991	8,094,256
1989	244,319	20,216	8,807,823
1990	248,958	26,503	9,628,745
1991	229,815	15,716	9,124,608
Total	1,145,971	102,381	$42,955,150

Source: DMAS Hospital Annual Statistics, April 8, 1992.

utilization review analyst contacts the hospital and requests the forms. In the future, the hospital will know that the forms need to be completed for the claim to be processed.

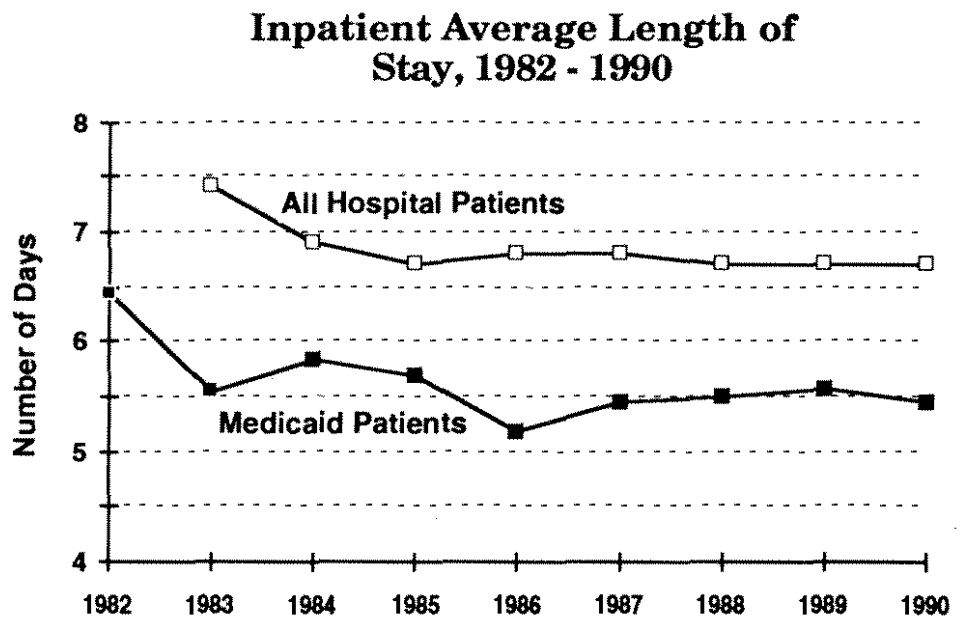
* * *

A site visit hospital's utilization review plan states that "quality health care is the knowledge and skill of its practitioners. The primary goal of the review of health care....is to identify less than optimal knowledge and skill, so that the gaps identified may be narrowed or eliminated by directed educational programs."

Further, the average length of stay for Medicaid recipients has also declined since 1982. As shown in Figure 25, the average length of stay for a Medicaid recipient in 1982 was 6.44 days while in 1990 it was 5.46 days. Although the decline in the length of stay cannot be totally attributed to utilization review, the program has helped to lower lengths of stay and therefore to contain costs. It is also important to note that Medicaid recipients' lengths of stay have been consistently lower than that of all hospital patients since 1983.

Role of Utilization Review in Hospitals Has Been Expanded. Medicaid is not the only payor of hospital services that requires utilization review. Most, if not all, third party payors require utilization review. For example, Blue Cross/Blue Shield for many of its insurance programs requires pre-certification of hospital stays. Some payors have their own staff located in the hospitals to conduct the utilization review while others, like Medicaid, rely on the hospital staff to conduct the concurrent review.

Figure 25



Source: JLARC staff analysis of DMAS and Department of Health data.

The ten site visit hospitals, the Medical College of Virginia Hospitals, and the University of Virginia Medical Center all agreed that the primary purpose of utilization review was to ensure that patients were treated appropriately in the least amount of time. The majority of the site visit hospitals include all patients in their utilization review programs even though not required to do so.

Similarly, almost all of the site visit hospitals have expanded the role of utilization review. The hospitals administrators stated that they have incorporated their utilization review programs into their overall quality assurance programs. The result has been that the efficiency and effectiveness of the care received by patients is being evaluated simultaneously. As hospital administrators explained:

> *Utilization review is very much a part of quality management but we don't just use utilization review to solve problems. Utilization review has become a patient advocate....Overutilization is not the focus but rather underutilization of services where a medical problem could have been prevented.*
>
> * * *
>
> *One hospital is currently conducting a cost-benefit analysis of inpatient length of stay versus home health care. Using information collected through utilization review, the hospital is determining whether allowing a patient to leave the hospital earlier by providing antibiotic*

treatment and home health services is efficient and if it has a negative impact on the patient that requires a return visit to the hospital.

* * *

Another hospital recently completed a study of dilation and curettages (D&C) and hysterectomies. The study found that 94 percent of the D&C are followed almost immediately by hysterectomies. The hospital concluded that the D&C should not be performed because they were highly cost ineffective — with a total cost of more than $1,100 per procedure.

Future Options for Hospital Utilization Review

While the current utilization review activities of Virginia Medicaid have resulted in cost avoidances, there are indications that overutilization of services continues to be a problem. As explained in Chapter III, it has been estimated that nationally, approximately ten to 20 percent of hospital admissions may be inappropriate. This overutilization is a factor in hospital cost inflation.

There are several options which DMAS might pursue to expand its utilization review activities, including prospective utilization review of inpatient services, expanded utilization review of outpatient services, and closer monitoring of provider practice patterns. In addition, if significant reimbursement reforms are implemented, DMAS should reexamine its utilization review strategies to ensure that they are logically linked to reimbursement methods.

Prospective Utilization Review Should Be Considered. According to industry trends and literature in the field, prospective utilization review of hospital services can be cost-effective. Prospective utilization review typically involves pre-authorization of the hospital stay by a third-party payor. One advantage of prospective utilization review cited in the literature is that decisions concerning justifiable admissions are made in advance, limiting liability for disallowed cases. Another advantage is that prospective utilization review can ensure that only patients requiring a hospital level of care are admitted. Once a patient is admitted to the hospital at least part of the stay typically can be justified as medically necessary by hospital staff.

During interviews with the ten site visit hospital administrators, they were asked about alternative methods of utilization review. The administrators indicated that there would be advantages and disadvantages of conducting prospective utilization review. The advantages cited included (1) hospitals would know in advance whether the hospital stays would be reimbursed by Virginia Medicaid and (2) this type of utilization review would provide opportunities for additional cost containment. Disadvantages mentioned included the difficulty of administration, shifting more of the cost burden to the hospitals, and a limitation of access if providers left the program because of the additional requirements.

The Medicare hospital utilization review program adopted pre-certification in 1990. The program was piloted for two years. According to the Medical Society of Virginia Review Organization, this program had a significant educational impact on providers, and length of stays did decrease during the pilot period. Future evaluations will be conducted to determine if length of stays continue to decrease.

In addition, 20 states have moved to prospective utilization review for Medicaid hospital services by requiring pre-certification of an inpatient hospital stay. These states use the pre-certification as an alternative to limiting the length of a hospital stay to a certain number of days. Prospective utilization review can be implemented in a variety of ways. For example, Colorado has limited prospective utilization review to specified procedures while many other states have implemented phone-in pre-admission review or have contracted the activity.

For Virginia Medicaid, DMAS has already implemented pre-admission screening for nursing homes. DMAS has reported that this activity avoided more than $56 million in costs in FY 1987 through FY 1991. Further, pre-certification of hospital stays for two long-stay, acute care hospitals was also implemented in 1991. DMAS estimated annual general fund savings from this pre-certification activity at more than $1.6 million per year.

Prospective utilization review could provide DMAS with an additional tool for controlling the utilization of Medicaid-financed hospital services. When used in coordination with concurrent and retrospective review, it would give DMAS the capability to control the services it pays for before, during, and after the admission. Prospective utilization review need not necessarily be implemented for all hospitals. DMAS could target prospective utilization review toward those hospitals where prospective utilization review would be cost-effective.

Recommendation (18). **The Department of Medical Assistance Services should study the feasibility of implementing prospective utilization review in coordination with its current utilization review activities.**

Expanded Utilization Review of Outpatient Hospital Services Could Also Be Beneficial. DMAS currently conducts limited review of outpatient hospital services. Those services that are currently reviewed include emergency room services at selected hospitals and rehabilitative therapies within rehabilitation hospitals. In 1990, DMAS staff began conducting utilization review of rehabilitation services, but implementation of the activity is not complete. Further, the current examination of emergency services is applied to only a few hospitals each fiscal year (17 in FY 1992).

It appears that Virginia hospitals are also just beginning to focus their attention on review of outpatient services. Staff from five of the ten site visit hospitals reported that they conducted some retrospective review of outpatient services.

Other third-party payors are also conducting utilization review of some outpatient services. For example, Blue Cross/Blue Shield's Keycare program requires that

outpatient surgery be pre-authorized. This requirement is similar to that required for inpatient hospital stays.

Medicare also conducts utilization review of 1,400 outpatient procedures as part of its hospital program. The review is retrospective, meaning that it occurs after the procedure has been completed. Medicare is also implementing analysis of provider practice patterns in each state. The Medical Society of Virginia Review Organization will be using these analyses to identify providers who overutilize outpatient procedures.

Implementation of a similar utilization review program by DMAS for Virginia Medicaid could provide similar benefits. As shown in Table 8, the top ten most frequently used outpatient procedures are for the most part broad in scope. One outpatient procedure — diagnostic interview, consultation, and evaluation — accounted for almost sixty percent of all outpatient reimbursement in FY 1991 according to DMAS staff. This procedure can include many different types of patient interactions with physicians. Utilization review of these services could provide DMAS staff with an opportunity to learn more about what activities comprise this procedure.

The potential of outpatient utilization review has been recognized by the U.S. Prospective Payment Assessment Commission (ProPAC). In its reviews of outpatient

Table 8

Top Ten Most Frequently Used Outpatient Procedures Fiscal Year 1991

Procedure	Number of Recipients	Total Payments
Diagnostic interview, consultation and evaluation	469,579	$49,332,103
Diagnostic interview and evaluation	13,672	943,808
Interview and evaluation, described as comprehensive	10,403	980,581
X-ray, other and unspecified	2,553	356,968
Interview and evaluation,described as brief	6,273	347,312
Consultation, not otherwise specified	5,135	294,838
Suture of skin	2,133	297,401
General physical examination	1,997	178,566
Interview and consultation, described as brief	1,922	171,979
Other	1,697	59,306

Source: JLARC staff analysis of DMAS claims history files, April 27, 1992.

services and reimbursement, ProPAC identified that there is a lack of adequate information to evaluate the appropriateness and need for outpatient hospital services. In their March 1992 report to Congress, they recommended that utilization review of outpatient services be strengthened.

Recommendation (19). **The Department of Medical Assistance Services should increase its utilization review of outpatient hospital services.**

Provider Practice Patterns Should Be Analyzed. As discussed earlier, hospitals have begun to coordinate their utilization review and quality assurance programs to determine the most cost-effective modes of treatment for different diagnoses. DMAS could also use patient-level data to monitor provider practices as part of its utilization review activities. For example, DMAS could use patient-level data to monitor Medicaid provider practices for new procedures, high cost procedures, or procedures that may be abused. This type of information could be used to identify and educate Medicaid providers about both overutilization and underutilization of services.

A patient level database as promoted by the Joint Commission on Health Care would allow ongoing analysis of provider practice patterns. This information could be used to help identify those hospitals and physicians for which overutilization may be a problem. A particular benefit of statewide patient level data is that treatments and outcomes for Medicaid patients could be compared to those for other types of patients. Thus, as recommended in Chapter III, it is important that any patient-level database which is developed in Virginia is designed to allow analysis of hospital and physician practice patterns.

Utilization Review Should Be Part of Payment Reform. Medicaid utilization review strategies should be compatible with the incentives created by reimbursement policy. For example, states which reimburse hospitals on a prospective per diem basis (such as Virginia) may wish to emphasize concurrent and retrospective utilization review because per diem payment may give hospitals a financial incentive to maximize lengths of stay. On the other hand, states which reimburse hospitals on a prospective per-admission basis (such as DRG-based systems) may consider de-emphasizing concurrent utilization review because the method of payment already gives hospitals financial incentives to minimize lengths of stay.

If Virginia modifies Medicaid payment methods, DMAS's utilization review strategies may also need to be revised so that they are compatible with whatever financial incentives may be created by the new payment system. This principle applies to both inpatient and outpatient hospital care.

Recommendation (20). **If Virginia decides to modify Medicaid reimbursement methods, the Department of Medical Assistance Services should evaluate its utilization review strategies to ensure that they continue to be compatible with the incentives created by the inpatient and outpatient reimbursement systems.**

Appendixes

Appendix A

Study Mandate

Senate Joint Resolution No. 180

Requesting the Joint Legislative Audit and review Commission to study the Commonwealth's Medicaid program and the indigent care appropriations to the state teaching hospitals and the Medical College of Hampton Roads.

Agreed to by the Senate, February 19, 1991
Agreed to by the House of Delegates, February 15, 1991

WHEREAS, a goal of the Commission on Health Care for All Virginians is to provide access to basic health care for all Virginians; and

WHEREAS, approximately 330,000 persons in Virginia are eligible for the Medicaid program, but an estimated 300,000 additional Virginians in poverty have no health insurance; and

WHEREAS, the number of Virginians eligible for Medicaid has increased by only 10 percent during the last 10 years, but Medicaid expenditures in Virginia have tripled during that period; and

WHEREAS, costs in the 1990-92 biennium are expected to be more than 40 percent greater than the costs in the 1988-90 biennium; and

WHEREAS, the Medicaid program now represents about 12 percent of the Commonwealth's general fund budget, with an estimated $1.4 billion (general fund) cost for the 1990-92 biennium; and

WHEREAS, Medicaid costs will continue to escalate at a rapid rate as inflation in health care costs far surpasses other goods and services; and new federal mandates are likely to continue as Congress expands health insurance for the elderly, disabled, and poor through Medicare and Medicaid; and

WHEREAS, federal mandates establish the core of the Medicaid program, but states can partially shape the benefits and costs through policy adjustments in reimbursement rates for service providers; services offered to recipients; utilization review to ensure appropriate care; and eligibility for groups of persons, and to some extent, how much recipients pay for their own care; and

WHEREAS, University of Virginia Medical Center, Medical College of Virginia Hospitals, and the Medical College of Hampton Roads provide a significant amount of care to low-income persons and receive state support for this care through Medicaid and direct general fund appropriations; now therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Joint Legislative Audit and Review Commission be requested to study the Virginia Medicaid program and the indigent care appropriations to the state teaching hospitals and the Medical College of Hampton Roads.

The study shall include, but not be limited to:

1. Assessment of the cost savings and health policy implications of limiting the scope or duration of optional services, or adjusting recipients' contributions to their care;

2. Examination of the interpretation of federal requirements to determine if they have been implemented in the most effective and least costly manner;

3. Determination of the effectiveness of current utilization review procedures in controlling costs and exploration of additional options;

4. Evaluation of reimbursement methods to determine if they adequately encourage cost effective delivery of services;

5. Determination of the sufficiency of reimbursement rates to provide quality care at the lowest required cost;

6. Review of budget and forecasting methods to ensure that they adequately identify and project the cost of policy changes, service utilization, and new mandates;

7. Determination of how the legislative branch could increase its capacity to more closely monitor Medicaid forecasts and expenditures;

8. Exploration of the costs of alternative administrative methods for implementing program requirements and options;

9. Examination of the relationship with other State programs to promote optimal utilization of State funds;

10. Identification of options for using Medicaid funds for services currently supported with general funds; and

11. Review of eligibility, scope of services, and reimbursement rates for indigent care at University of Virginia Medical Center, Medical College of Virginia Hospitals, and the Medical College of Hampton Roads, and a determination of the appropriateness of general fund and Medicaid allocation methodologies.

All agencies of the Commonwealth shall provide assistance upon request to the study as appropriate.

The Joint Legislative Audit and Review Commission shall complete its work in time to submit its findings and recommendations to the Governor and to the 1993 Session of the General Assembly, and shall provide interim reports to the Commission on Health Care for All Virginians and to the 1992 Session of the General Assembly and at other times as appropriate, using the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Appendix B

Hospitals Visited During Site Visits

As part of the JLARC review of the Medicaid program in Virginia hospitals, the following acute care hospitals were visited:

- Community Memorial Healthcenter
- Franklin Memorial Hospital
- HCA Lewis Gale Hospital, Incorporated
- Loudoun Memorial Hospital
- Medical College of Virginia Hospitals
- Metropolitan Hospital
- Page Memorial Hospital, Incorporated
- Prince William Hospital Corporation
- Riverside Middle Peninsula
- Sentara Norfolk General
- University of Virginia Medical Center
- Winchester Medical Center, Incorporated

Appendix C

Glossary

This glossary was compiled from a variety of sources. These included documents from the Prospective Payment Assessment Commission, American Institute of Certified Public Accountants, Virginia Health Services Cost Review Council, the *Code of Federal Regulations*, and Virginia Medicaid documents.

Acute Care:	Inpatient general routine care provided to patients who are in a phase of illness that does not require the concentrated and continuous observation and treatment provided in intensive-care units.
Adjusted Patient Days:	A hospital output measure which reflects the number of inpatient days and outpatient visits provided by a hospital, expressed in units equivalent to an inpatient day. The number of outpatient visits equivalent to a an inpatient day is equal to the ratio of inpatient charges per admission to outpatient charges per admission, times the number of outpatient visits.
Adjusted Admissions:	A hospital output measure which reflects the number of inpatient admissions and outpatient visits provided by a hospital, expressed in units equivalent to an inpatient admission. The number of outpatient visits equivalent to an admission is equal to the ratio of inpatient charges per admission to outpatient charges per admission, times the number of outpatient visits.
Bad Debt:	The amount of a hospital's receivables that are not recovered from patients who are not indigent.
Capital:	Capital represents the value of an organization's assets at any given time. Medicare's definition of capital costs includes depreciation, interest, leases and rentals, and taxes and insurance on tangible assets, such as plant and equipment.
Case Mix:	The composition of a health program's patients who are classified by diagnosis or by some other measure.
Charge:	The amount of money asked for by a hospital in return for a product or a service. A hospital's charge is equivalent to its list or asking price for a service.

Charity Care:	Hospital care provided to indigent patients with no means to pay.
Claim:	A request to a third party payor by a person covered by the third party program or an assignee (usually a provider of service) for payment of benefits covered by the third party.
Co-payment:	A type of cost sharing whereby insured or covered persons pay a specified flat amount per unit of service or unit of time.
Cost:	The cost to the buyer is the amount of money paid by the buyer to acquire a good or service. The cost to the seller is the amount of money paid by the seller for the inputs used to produce a service or good.
Cost Avoidances:	The amount of funds that are not expended by Virginia Medicaid because of changes in the program or in State health policy.
Cost Report:	An annual report required of all institutions participating in Medicaid and Medicare programs that records the costs incurred by the institution providing services to all patients, the charges ascribed to all patients, and the payments received during a specified reporting period. Costs are defined and reported according to rules established by the Medicare or Medicaid program.
Cost Savings:	The amount of funds that are recovered by Virginia Medicaid because of changes in the program or in State health policy.
Diagnosis-related group (DRG):	A patient classification scheme that categorizes patients who are medically related with respect to primary and secondary diagnosis, age, and complications.
Discharge:	A formal release from a hospital or skilled nursing facility. Discharges include persons who died during their stay or were transferred to another facility.
Disproportionate Share:	A designation for a hospital that serves a specified percentage of low-income patients, depending on location and size. OBRA-1987 established minimum criteria for Medicaid disproportionate share. Under Medicaid, states have the flexibility to develop their own definition of a disproportionate share hospital and to develop formulas to calculate payment adjustments so long as federal statutory and regulatory requirements are met.

Global Screen:	A quantitative standard used to evaluate the reasonableness of a facility's overall increase in cost. If the facility passes the Global Screen, it is presumed that all the expenses incurred by the facility are reasonable. The forecasted national increase in cost per admission, as contained in the publication *Rate Controls*, determines the Global Screen.
Indigent Care:	Medical services provided to individuals without the means to pay for them.
Inpatient:	A person who is admitted to a hospital for bed occupancy to receive hospital services. The person must be formally admitted and there must be an expectation that the person will remain overnight and occupy a bed.
Inpatient Hospital Services:	Items and services furnished to an admitted patient of a hospital by the hospital, including room and board, nursing and related services, diagnostic and therapeutic services, and medical or surgical services.
Outpatient:	A person who has not been admitted by the provider and who is not lodged in the provider facility while receiving its services.
Peer Grouping:	Peer grouping provides a mechanism for grouping hospitals to compare facilities with similar characteristics. Peer group comparisons are used in both retrospective and prospective systems to limit or to project payment. In systems that include this feature the peer standard provides a basis for generating rate averages for similar services provided by similar facilities, and attempts to recognize reasonable differences for groups of hospitals believed to be similar. The peer group imposes an external standard for payment.
Per Diem Payment Unit:	A measure of hospital payment based on the average cost or charge for a day of hospital care. Per diem payment units are used with prospective payment systems. The incentives of per diem payment tends to encourage efficiency in the delivery of service, but is not sensitive to length of stay.
Pre-certification Program:	A type of utilization review that screens and certifies cases prior to treatment.

Prospective Payment:	A method of paying for health care services in which full amounts or rates of payment are established in advance, and providers are paid these amounts or rates regardless of the costs they actually incur.
Quality Assurance:	A coordinated set of activities to evaluate the availability, acceptability, accessibleness, appropriateness, and outcome of services provided to enrollees and to remedy any deficiencies identified through the assessment process.
Reasonable Costs:	For any service they are determined in accordance with regulations establishing the method or methods to be used, and the items to be included. They take into account both direct and indirect costs of providers of services. These costs may vary from one institution to another.
Utilization Review:	The variety of methods and procedures used to monitor utilization of hospital services for appropriate and acceptable levels of care. A variety of approaches to UR can be used, including preadmission review, concurrent review (conducted during the stay) and retrospective review.

Appendix D

Individual Hospital Data

This appendix contains six tables. Table D-1 shows FY 1991 occupancy rates (staffed beds) for individual hospitals. Table D-2 shows Medicaid inpatient payments for participating acute-care hospitals in FY 1990.

Table D-3 shows Medicaid inpatient payments as a percentage of total net patient revenues for individual hospitals for FY 1990. This table is not a comprehensive source of data. It contains data for only those hospitals which file individual cost reports with the Health Services Cost Review Council. Hospitals which are part of a system which submitted a system-level cost report in FY 1990 are excluded from the analysis.

Table D-4 shows the Medicaid utilization rates for each in-state, acute care hospital in FY 1990. Table D-5 shows Medicaid outpatient payments for participating hospitals in FY 1990.

Table D-6 shows Medicaid outpatient payments as a percentage of total net patient revenues for individual hospitals for FY 1990. This table is not comprehensive for the same reason noted for Table D-3.

Table D-1

Occupancy Rates (Staffed Beds) in Virginia Acute-Care Hospitals, FY 1991

Facility	FY 1991 Occupancy Rate	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
ALEXANDRIA	72.40	II	URBAN	414	NON-PROFIT
ALLEGHANY	50.40	III	RURAL	204	NON-PROFIT
ARLINGTON	71.70	II	URBAN	350	NON-PROFIT
BATH COUNTY COMMUNITY	41.40	I	RURAL	25	NON-PROFIT
BUCHANNAN GENERAL	37.60	III	RURAL	94	NON-PROFIT
CARILION HEALTH SYSTEM	54.10				
CHESAPEAKE GENERAL	77.90	V	URBAN	260	HOSPITAL AUTHORITY
CHIDLREN'S-KING'S DAUGHTERS	85.60	V	URBAN	132	NON-PROFIT
CHILDREN'S	54.00	IV	URBAN	36	NON-PROFIT
CHIPPENHAM	67.70	IV	URBAN	470	PROPRIETARY
COMM OF ROANOKE VALLEY	44.00	III	URBAN	400	NON-PROFIT
COMMUNITY MEMORIAL	80.90	IV	RURAL	120	NON-PROFIT
CULPEPER MEMORIAL	49.40	I	RURAL	96	NON-PROFIT
DEPAUL	75.90	V	URBAN	402	NON-PROFIT
FAIR OAKS	67.20	II	URBAN	160	COUNTY
FAIRFAX	83.00	II	URBAN	656	COUNTY
FAUQUIER	56.70	I	RURAL	121	NON-PROFIT
GREENSVILLE MEMORIAL	53.40	IV	RURAL	182	NON-PROFIT
HALIFAX-SOUTH BOSTON	52.50	IV	RURAL	192	NON-PROFIT
HENRICO DOCTORS	73.20	IV	URBAN	340	PROPRIETARY
HUMANA - CLINCH VALLEY	57.40	III	RURAL	200	PROPRIETARY
HUMANA-BAYSIDE	44.80	V	URBAN	250	PROPRIETARY
HUMANA-ST. LUKE'S	44.40	IV	URBAN	200	PROPRIETARY
JEFFERSON MEMORIAL	40.10	II	URBAN	120	PROPRIETARY
JOHN RANDOLPH	62.00	IV	URBAN	150	HOSPITAL DISTRICT
JOHNSTON MEMORIAL	57.70	III	RURAL	154	NON-PROFIT
JOHNSTON-WILLIS	54.80	IV	URBAN	292	PROPRIETARY
LEE COUNTY COMMUNITY	42.70	III	RURAL	80	NON-PROFIT
LEWIS-GALE	65.80	III	URBAN	406	PROPRIETARY
LONESOME PINE	57.40	III	RURAL	60	NON-PROFIT
LOUDOUN MEMORIAL	52.50	II	URBAN	123	NON-PROFIT
MARTHA JEFFERSON	66.00	I	URBAN	221	NON-PROFIT
MARY IMMACULATE	64.60	V	URBAN	110	NON-PROFIT
MARY WASHINGTON	83.90	I	RURAL	340	NON-PROFIT
MARYVIEW	60.90	V	URBAN	321	NON-PROFIT
MEDICAL COLLEGE OF VIRGINIA	74.10	IV	URBAN	1000	STATE
MEM OF MARTINSVILLE & HENRY CO	69.30	III	RURAL	264	NON-PROFIT
MEMORIAL OF DANVILLE	78.20	III	URBAN	506	NON-PROFIT
METROPOLITAN	54.10	IV	URBAN	180	PROPRIETARY
MONTGOMERY REGIONAL	42.20	III	RURAL	146	PROPRIETARY
MOUNT VERNON	63.80	II	URBAN	235	COUNTY

Table D-1 (continued)

Facility	FY 1991 Occupancy Rate	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
NATIONAL HOSP. - ORTHO/REHAB	44.30	II	URBAN	174	NON-PROFIT
NEWPORT NEWS GENERAL	19.30	V	URBAN	126	NON-PROFIT
NORFOLK COMMUNITY	32.20	V	URBAN	202	NON-PROFIT
NORTHAMPTON-ACCOMACK	56.80	V	RURAL	158	NON-PROFIT
NORTHERN VIRGINIA DOCTORS	50.30	II	URBAN	267	PROPRIETARY
NORTON COMMUNITY	45.80	III	RURAL	129	NON-PROFIT
PAGE MEMORIAL	36.40	I	RURAL	54	NON-PROFIT
PORTSMOUTH GENERAL	60.70	V	URBAN	311	NON-PROFIT
POTOMAC	54.70	II	URBAN	153	NON-PROFIT
PRINCE WILLIAM	57.40	II	URBAN	170	NON-PROFIT
PULASKI COMMUNITY	40.90	III	RURAL	153	NON-PROFIT
R J REYNOLDS/PATRICK COUNTY	42.60	III	RURAL	77	NON-PROFIT
RAPPAHANNOCK GENERAL	48.40	V	RURAL	76	NON-PROFIT
RESTON HOSPITAL CENTER	69.00	II	URBAN	127	PROPRIETARY
RETREAT	40.00	IV	URBAN	230	NON-PROFIT
RICHMOND COMMUNITY	47.90	IV	URBAN	104	NON-PROFIT
RICHMOND EYE & EAR	13.10	IV	URBAN	60	NON-PROFIT
RICHMOND MEMORIAL	63.10	IV	URBAN	420	NON-PROFIT
RIVERSIDE MIDDLE PENNINSULA	66.00	V	URBAN	71	NON-PROFIT
RIVERSIDE REGIONAL CTR	62.00	V	URBAN	576	NON-PROFIT
RIVERSIDE TAPPAHANNOCK	19.00	V	RURAL	100	NON-PROFIT
ROCKINGHAM MEMORIAL	53.20	I	RURAL	330	NON-PROFIT
RUSSELL COUNTY MEDICAL CTR	62.30	III	RURAL	78	PROPRIETARY
SENTARA HAMPTON GENERAL	69.00	V	URBAN	369	NON-PROFIT
SENTARA HEALTH SYSTEM	74.40				
SHENANDOAH CO MEMORIAL	42.40	I	RURAL	129	NON-PROFIT
SMYTH COUNTY COMMUNITY	40.70	III	RURAL	176	NON-PROFIT
SOUTHAMPTON MEMORIAL	49.10	V	RURAL	221	NON-PROFIT
SOUTHSIDE COMMUNITY	41.10	IV	RURAL	137	NON-PROFIT
SOUTHSIDE REGIONAL CTR	81.30	IV	URBAN	468	HOSPITAL AUTHORITY
ST MARY'S (RICHMOND)	75.50	IV	URBAN	401	NON-PROFIT
ST. MARY'S (NORTON)	42.00	III	RURAL	98	NON-PROFIT
STONEWALL JACKSON	39.80	I	RURAL	130	NON-PROFIT
STUART CIRCLE	72.80	IV	URBAN	153	PROPRIETAR
TAZEWELL COMMUNITY	38.90	III	RURAL	56	NON-PROFIT
TWIN COUNTY COMMUNITY	53.00	III	RURAL	149	NON-PROFIT
UNIVERSITY OF VIRGINIA	80.60	I	URBAN	579	STATE
VIRGINIA BEACH GENERAL	75.70	V	URBAN	274	NON-PROFIT
WARREN MEMORIAL	44.70	I	RURAL	151	NON-PROFIT
WILLIAMSBURG COMMUNITY	53.10	V	URBAN	139	NON-PROFIT
WINCHESTER MEDICAL CENTER	71.80	I	RURAL	356	NON-PROFIT
WISE APPALACHIAN	33.20	III	RURAL	67	NON-PROFIT
WYTHE COUNTY	50.10	III	RURAL	106	NON-PROFIT

Source: JLARC staff analysis of Health Services Cost Review Council data. Includes actue care hospitals only.

Table D-2

Virginia Medicaid Inpatient Hospital Payments by Provider

Facility	FY 1990 Medicaid Payments	Percent of Total Payments	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
Medical College of VA	$33,163,519.00	17.62	IV	URBAN	1000	GOVERNMENT
University of Virginia	$19,173,453.00	10.19	I	URBAN	579	GOVERNMENT
Roanoke Memorial	$11,392,084.00	6.05	III	URBAN	677	NON-PROFIT
Sentara Norfolk General	$10,487,845.00	5.57	V	URBAN	644	NON-PROFIT
Fairfax	$6,116,326.00	3.25	II	URBAN	656	COUNTY
Riverside	$5,902,083.00	3.14	V	URBAN	576	NON-PROFIT
Children's Hosp King Daugh	$5,827,763.00	3.10	V	URBAN	132	NON-PROFIT
Southside Regional Med Ctr	$4,767,197.00	2.53	IV	URBAN	468	HOSPITAL A
Depaul	$3,183,873.00	1.69	V	URBAN	402	NON-PROFIT
Louise Obici Memorial	$3,072,162.00	1.63	V	URBAN	243	NON-PROFIT
Sentara Hampton General	$2,828,450.00	1.50	V	URBAN	369	NON-PROFIT
Memorial Hospital Danville	$2,811,260.00	1.49	III	URBAN	506	NON-PROFIT
Arlington	$2,794,540.00	1.48	II	URBAN	350	NON-PROFIT
Metropolitan	$2,744,100.00	1.46	IV	URBAN	180	PROPRIETAR
Lake Taylor City	$2,613,516.00	1.39	V	URBAN	332	HOSPITAL A
Portsmouth General	$2,512,803.00	1.33	V	URBAN	311	NON-PROFIT
Mary Washington	$2,499,567.00	1.33	I	RURAL	340	NON-PROFIT
Maryview	$2,317,065.00	1.23	V	URBAN	321	NON-PROFIT
Virginia Baptist	$2,259,498.00	1.20	III	URBAN	328	NON-PROFIT
Richmond Memorial	$2,257,182.00	1.20	IV	URBAN	420	NON-PROFIT
Newport News General	$1,969,556.00	1.05	V	URBAN	126	NON-PROFIT
Norfolk Community	$1,905,592.00	1.01	V	URBAN	202	NON-PROFIT
The Alexandria Hospital	$1,864,598.00	0.99	II	URBAN	414	NON-PROFIT
Chesapeake General	$1,789,819.00	0.95	V	URBAN	260	HOSPITAL A
Humana Clinch Valley	$1,753,886.00	0.93	III	RURAL	200	PROPRIETAR
Richmond Community	$1,714,375.00	0.91	IV	URBAN	104	NON-PROFIT
John Randolph	$1,678,738.00	0.89	IV	URBAN	150	HOSPITAL D
Prince William	$1,536,928.00	0.82	II	URBAN	170	NON-PROFIT
Winchester Medical Center	$1,492,283.00	0.79	I	RURAL	356	NON-PROFIT
Virginia Beach General	$1,411,446.00	0.75	V	URBAN	274	NON-PROFIT
Humana Hospital Bayside	$1,386,774.00	0.74	V	URBAN	250	PROPRIETAR
Lynchburg General	$1,333,072.00	0.71	III	URBAN	270	NON-PROFIT
Potomac	$1,321,831.00	0.70	II	URBAN	153	NON-PROFIT
St. Marys Norton	$1,282,192.00	0.68	III	RURAL	98	NON-PROFIT
Bristol Memorial	$1,267,534.00	0.67	III	URBAN	422	NON-PROFIT
Rockingham Memorial	$1,239,531.00	0.66	I	RURAL	330	NON-PROFIT
Buchanan General	$1,200,860.00	0.64	III	RURAL	94	NON-PROFIT
Henrico Doctors	$1,193,363.00	0.63	IV	URBAN	340	PROPRIETAR
Northampton Accomack Mem	$1,171,797.00	0.62	V	RURAL	158	NON-PROFIT
Chippenham	$1,159,184.00	0.62	IV	URBAN	470	PROPRIETAR
Halifax-South Boston Comm	$1,147,185.00	0.61	IV	RURAL	192	NON-PROFIT
Russell County Medical Ctr	$1,142,420.00	0.61	III	RURAL	78	PROPRIETAR
Mount Vernon	$1,020,966.00	0.54	II	URBAN	235	COUNTY
Twin County Community	$991,446.00	0.53	III	RURAL	149	NON-PROFIT
Lewis-Gale	$960,681.00	0.51	III	URBAN	406	PROPRIETAR
Greensville Memorial	$941,706.00	0.50	IV	RURAL	182	NON-PROFIT
Norton Community	$938,643.00	0.50	III	RURAL	129	NON-PROFIT
Community Hosp Roanoke Val	$938,121.00	0.50	III	URBAN	400	NON-PROFIT
Southside Community Hosp	$879,806.00	0.47	IV	RURAL	137	NON-PROFIT

Table D-2 (continued)

Facility	FY 1990 Medicaid Payments	Percent of Total Payments	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
Johnston Memorial	$878,155.00	0.47	III	RURAL	154	NON-PROFIT
St. Marys Richmond	$876,246.00	0.47	IV	URBAN	401	NON-PROFIT
Pulaski Community	$870,991.00	0.46	III	RURAL	153	NON-PROFIT
Wise Appalachian Regional	$818,145.00	0.43	III	RURAL	67	NON-PROFIT
Lee County Community	$755,485.00	0.40	III	RURAL	80	NON-PROFIT
Northern VA Doctors	$752,284.00	0.40	II	URBAN	267	PROPRIETAR
Smyth County Community	$733,503.00	0.39	III	RURAL	176	NON-PROFIT
Children's Hosp Nat'l Med	$726,448.00	0.39	IV	URBAN	36	NON-PROFIT
Fair Oaks	$711,769.00	0.38	II	URBAN	160	COUNTY, NO
Community Memorial	$707,720.00	0.38	IV	RURAL	120	NON-PROFIT
Mem Hosp Mville-Henry Co.	$674,714.00	0.36	III	RURAL	264	NON-PROFIT
Southampton Memorial	$639,349.00	0.34	V	RURAL	221	NON-PROFIT
Lonesome Pine	$617,218.00	0.33	III	RURAL	60	NON-PROFIT
Alleghany Regional	$613,911.00	0.33	III	RURAL	204	NON-PROFIT
Augusta Community	$582,010.00	0.31	I	RURAL	171	NON-PROFIT
Jefferson Memorial	$580,644.00	0.31	II	URBAN	120	PROPRIETAR
Sentara Leigh General	$572,079.00	0.30	V	URBAN	250	NON-PROFIT
Loudoun Memorial	$566,195.00	0.30	II	URBAN	123	NON-PROFIT
Wythe County Community	$532,110.00	0.28	III	RURAL	106	NON-PROFIT
Radford Community	$518,501.00	0.28	III	RURAL	175	NON-PROFIT
Montgomery Regional	$513,822.00	0.27	III	RURAL	146	PROPRIETAR
Johnston-Willis	$511,044.00	0.27	IV	URBAN	292	PROPRIETAR
The Fauquier Hospital	$397,958.00	0.21	I	RURAL	121	NON-PROFIT
Mary Immaculate	$372,413.00	0.20	V	URBAN	110	NON-PROFIT
Shenandoah County Mem	$370,867.00	0.20	I	RURAL	129	NON-PROFIT
Williamsburg Community	$364,553.00	0.19	V	URBAN	139	NON-PROFIT
Culpeper Memorial	$334,161.00	0.18	I	RURAL	96	NON-PROFIT
Franklin Memorial	$326,216.00	0.17	III	RURAL	62	NON-PROFIT
Rappahannock General	$325,777.00	0.17	V	RURAL	76	NON-PROFIT
Martha Jefferson	$322,212.00	0.17	I	URBAN	221	NON-PROFIT
Stonewall Jackson	$307,916.00	0.16	I	RURAL	130	NON-PROFIT
Bedford Community Memorial	$297,282.00	0.16	III	RURAL	166	NON-PROFIT
RJ Reynolds Patrick Co Mem	$279,205.00	0.15	III	RURAL	77	NON-PROFIT
Warren Memorial	$273,987.00	0.15	I	RURAL	151	NON-PROFIT
Reston Hospital Center	$259,593.00	0.14	II	URBAN	127	PROPRIETAR
Stuart Circle	$228,910.00	0.12	IV	URBAN	153	PROPRIETAR
Giles Memorial	$216,187.00	0.11	III	RURAL	65	NON-PROFIT
Tazewell Community	$208,664.00	0.11	III	RURAL	56	NON-PROFIT
National Orthopedic	$202,754.00	0.1	II	URBAN	174	NON-PROFIT
Retreat	$200,104.00	0.11	IV	URBAN	230	NON-PROFIT
Riverside Mid-Pen	$190,587.00	0.10	V	URBAN	71	NON-PROFIT
Page Memorial	$162,390.00	0.09	I	RURAL	54	NON-PROFIT
Humana St. Lukes	$146,548.00	0.08	IV	URBAN	200	PROPRIETAR
Riverside Tappahannock	$118,793.00	0.06	V	RURAL	100	NON-PROFIT
Bath County Community	$99,570.00	0.05	I	RURAL	25	NON-PROFIT
Richmond Eye and Ear	$50,867.00	0.03	IV	URBAN	60	NON-PROFIT
Hospice of Northern VA	$39,907.00	0.02	II	URBAN	15	NON-PROFIT
Gill Memorial E.E.N.T.	$19,532.00	0.01	III	URBAN	40	PROPRIETAR

Source: JLARC staff analysis of DMAS and Health Services Cost Review Council data. Includes acute care hospitals only.

Table D-3

Virginia Medicaid Inpatient Hospital Payments by Provider As a Percentage of Reported Net Patient Revenues

Facility	FY 1990 Medicaid Payments	Percent of Net Patient Revenues	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
Lake Taylor City	$2,613,516.00	25.09	V	URBAN	332	HOSPITAL A
Newport News General	$1,969,556.00	22.73	V	URBAN	126	NON-PROFIT
Norfolk Community	$1,905,592.00	18.85	V	URBAN	202	NON-PROFIT
Richmond Community	$1,714,375.00	16.05	IV	URBAN	104	NON-PROFIT
Medical College of VA	$33,163,519.00	14.35	IV	URBAN	1000	GOVERNMENT
Metropolitan	$2,744,100.00	13.36	IV	URBAN	180	PROPRIETAR
Children's Hosp Nat'l Med	$726,448.00	13.15	IV	URBAN	36	NON-PROFIT
Wise Appalachian Regional	$818,145.00	11.53	III	RURAL	67	NON-PROFIT
St. Marys Norton	$1,282,192.00	11.19	III	RURAL	98	NON-PROFIT
Children's Hosp King Daugh	$5,827,763.00	10.53	V	URBAN	132	NON-PROFIT
Southside Regional Med Ctr	$4,767,197.00	9.91	IV	URBAN	468	HOSPITAL A
Louise Obici Memorial	$3,072,162.00	9.46	V	URBAN	243	NON-PROFIT
Russell County Medical Ctr	$1,142,420.00	8.76	III	RURAL	78	PROPRIETAR
Greensville Memorial	$941,706.00	8.58	IV	RURAL	182	NON-PROFIT
University of Virginia	$19,173,453.00	8.54	I	URBAN	579	GOVERNMENT
Lee County Community	$755,485.00	8.45	III	RURAL	80	NON-PROFIT
John Randolph	$1,678,738.00	7.72	IV	URBAN	150	HOSPITAL D
Portsmouth General	$2,512,803.00	7.72	V	URBAN	311	NON-PROFIT
Northampton Accomack Mem	$1,171,797.00	7.45	V	RURAL	158	NON-PROFIT
Lonesome Pine	$617,218.00	7.08	III	RURAL	60	NON-PROFIT
Franklin Memorial	$326,216.00	6.86	III	RURAL	62	NON-PROFIT
Halifax-South Boston Comm	$1,147,185.00	6.53	IV	RURAL	192	NON-PROFIT
Buchanan General	$1,200,860.00	6.43	III	RURAL	94	NON-PROFIT
Pulaski Community	$870,991.00	6.00	III	RURAL	153	NON-PROFIT
Southside Community Hosp	$879,806.00	5.97	IV	RURAL	137	NON-PROFIT
Norton Community	$938,643.00	5.73	III	RURAL	129	NON-PROFIT
Giles Memorial	$216,187.00	5.42	III	RURAL	65	NON-PROFIT
RJ Reynolds Patrick Co Mem	$279,205.00	5.39	III	RURAL	77	NON-PROFIT
Twin County Community	$991,446.00	5.36	III	RURAL	149	NON-PROFIT
Sentara Hampton General	$2,828,450.00	5.32	V	URBAN	369	NON-PROFIT
Riverside	$5,902,083.00	5.31	V	URBAN	576	NON-PROFIT
Memorial Hospital Danville	$2,811,260.00	5.15	III	URBAN	506	NON-PROFIT
Depaul	$3,183,873.00	4.82	V	URBAN	402	NON-PROFIT
Smyth County Community	$733,503.00	4.63	III	RURAL	176	NON-PROFIT
Bath County Community	$99,570.00	4.59	I	RURAL	25	NON-PROFIT
Humana Clinch Valley	$1,753,886.00	4.57	III	RURAL	200	PROPRIETAR
Radford Community	$518,501.00	4.43	III	RURAL	175	NON-PROFIT
Community Memorial	$707,720.00	4.33	IV	RURAL	120	NON-PROFIT
Humana Hospital Bayside	$1,386,774.00	4.32	V	URBAN	250	PROPRIETAR
Wythe County Community	$532,110.00	4.23	III	RURAL	106	NON-PROFIT
Maryview	$2,317,065.00	4.21	V	URBAN	321	NON-PROFIT
Prince William	$1,536,928.00	4.16	II	URBAN	170	NON-PROFIT
Johnston Memorial	$878,155.00	4.15	III	RURAL	154	NON-PROFIT
Richmond Memorial	$2,257,182.00	4.04	IV	URBAN	420	NON-PROFIT
Southampton Memorial	$639,349.00	4.00	V	RURAL	221	NON-PROFIT
Mary Washington	$2,499,567.00	3.71	I	RURAL	340	NON-PROFIT
Potomac	$1,321,831.00	3.64	II	URBAN	153	NON-PROFIT
Arlington	$2,794,540.00	3.51	II	URBAN	350	NON-PROFIT
Chesapeake General	$1,789,819.00	3.44	V	URBAN	260	HOSPITAL A
Page Memorial	$162,390.00	3.32	I	RURAL	54	NON-PROFIT
Shenandoah County Mem	$370,867.00	3.17	I	RURAL	129	NON-PROFIT
Tazewell Community	$208,664.00	3.12	III	RURAL	56	NON-PROFIT
Culpeper Memorial	$334,161.00	3.06	I	RURAL	96	NON-PROFIT

Table D-3 (continued)

Facility	FY 1990 Medicaid Payments	Percent of Net Patient Revenues	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
Stonewall Jackson	$307,916.00	3.01	I	RURAL	130	NON-PROFIT
Rappahannock General	$325,777.00	2.97	V	RURAL	76	NON-PROFIT
Warren Memorial	$273,987.00	2.81	I	RURAL	151	NON-PROFIT
Rockingham Memorial	$1,239,531.00	2.76	I	RURAL	330	NON-PROFIT
Riverside Tappahannock	$118,793.00	2.75	V	RURAL	100	NON-PROFIT
Montgomery Regional	$513,822.00	2.67	III	RURAL	146	PROPRIETAR
Alleghany Regional	$613,911.00	2.60	III	RURAL	204	NON-PROFIT
Northern VA Doctors	$752,284.00	2.45	II	URBAN	267	PROPRIETAR
The Alexandria Hospital	$1,864,598.00	2.26	II	URBAN	414	NON-PROFIT
Virginia Beach General	$1,411,446.00	2.22	V	URBAN	274	NON-PROFIT
Winchester Medical Center	$1,492,283.00	2.17	I	RURAL	356	NON-PROFIT
Mem Hosp Mville-Henry Co.	$674,714.00	2.10	III	RURAL	264	NON-PROFIT
The Fauquier Hospital	$397,958.00	2.07	I	RURAL	121	NON-PROFIT
Community Hosp Roanoke Val	$938,121.00	2.00	III	URBAN	400	NON-PROFIT
Loudoun Memorial	$566,195.00	1.92	II	URBAN	123	NON-PROFIT
Lewis-Gale	$960,681.00	1.55	III	URBAN	406	PROPRIETAR
Riverside Mid-Pen	$190,587.00	1.54	V	URBAN	71	NON-PROFIT
Mary Immaculate	$372,413.00	1.53	V	URBAN	110	NON-PROFIT
Williamsburg Community	$364,553.00	1.37	V	URBAN	139	NON-PROFIT
Chippenham	$1,159,184.00	1.20	IV	URBAN	470	PROPRIETAR
Henrico Doctors	$1,193,363.00	1.13	IV	URBAN	340	PROPRIETAR
St. Marys Richmond	$876,246.00	1.09	IV	URBAN	401	NON-PROFIT
Martha Jefferson	$322,212.00	1.02	I	URBAN	221	NON-PROFIT
Stuart Circle	$228,910.00	0.87	IV	URBAN	153	PROPRIETAR
Richmond Eye and Ear	$50,867.00	0.85	IV	URBAN	60	NON-PROFIT
Johnston-Willis	$511,044.00	0.85	IV	URBAN	292	PROPRIETAR
Reston Hospital Center	$259,593.00	0.84	II	URBAN	127	PROPRIETAR
Retreat	$200,104.00	0.77	IV	URBAN	230	NON-PROFIT
National Orthopedic	$202,754.00	0.69	II	URBAN	174	NON-PROFIT
Humana St. Lukes	$146,548.00	0.54	IV	URBAN	200	PROPRIETAR
TOTALS	83	151547367				

Note: Data shown are for individual hospitals for which net patient revenue data were available from the Health Services Cost Review Council. Data on net patient revenues for individual hospitals within hospital systems were not available for this analysis.

Source: JLARC staff analysis of DMAS and Health Services Cost Review Council data.

Table D-4

Virginia Medicaid Utilization Rates by Provider

Facility	FY 1990 OMAS % Utilization	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
Lake Taylor City	54	V	URBAN	332	HOSPITAL A
Children's Hosp King Daug	33	V	URBAN	132	NON-PROFIT
Children's Hosp Nat'l Med	31	IV	URBAN	36	NON-PROFIT
Norfolk Community	31	V	URBAN	202	NON-PROFIT
Newport News General	26	V	URBAN	126	NON-PROFIT
St. Marys Norton	25	III	RURAL	98	NON-PROFIT
Richmond Community	24	IV	URBAN	104	NON-PROFIT
Wise Appalachian Regional	24	III	RURAL	67	NON-PROFIT
Russell County Medical Ct	23	III	RURAL	78	PROPRIETAR
Portsmouth General	21	V	URBAN	311	NON-PROFIT
Franklin Memorial	20	III	RURAL	62	NON-PROFIT
Medical College of VA	20	IV	URBAN	1000	GOVERNMENT
Metropolitan	18	IV	URBAN	180	PROPRIETAR
Lonesome Pine	17	III	RURAL	60	NON-PROFIT
Lee County Community	16	III	RURAL	80	NON-PROFIT
Louise Obici Memorial	16	V	URBAN	243	NON-PROFIT
Southside Community Hosp	16	IV	RURAL	137	NON-PROFIT
Humana Clinch Valley	15	III	RURAL	200	PROPRIETAR
RJ Reynolds Patrick Co Me	15	III	RURAL	77	NON-PROFIT
Roanoke Memorial	15	III	URBAN	677	NON-PROFIT
Southside Regional Med Ct	15	IV	URBAN	468	HOSPITAL A
Buchanan General	14	III	RURAL	94	NON-PROFIT
Greensville Memorial	14	IV	RURAL	182	NON-PROFIT
Northampton Accomack Mem	14	V	RURAL	158	NON-PROFIT
Sentara Hampton General	14	V	URBAN	369	NON-PROFIT
Bedford Community Memoria	13	III	RURAL	166	NON-PROFIT
Norton Community	13	III	RURAL	129	NON-PROFIT
Sentara Norfolk General	13	V	URBAN	644	NON-PROFIT
University of Virginia	13	I	URBAN	579	GOVERNMENT
Virginia Baptist	13	III	URBAN	328	NON-PROFIT
Giles Memorial	12	III	RURAL	65	NON-PROFIT
Smyth County Community	12	III	RURAL	176	NON-PROFIT
Southampton Memorial	12	V	RURAL	221	NON-PROFIT
Twin County Community	12	III	RURAL	149	NON-PROFIT
Halifax-South Boston Comm	11	IV	RURAL	192	NON-PROFIT
Humana Hospital Bayside	11	V	URBAN	250	PROPRIETAR
John Randolph	11	IV	URBAN	150	HOSPITAL D
Pulaski Community	11	III	RURAL	153	NON-PROFIT
Community Memorial	10	IV	RURAL	120	NON-PROFIT
Depaul	10	V	URBAN	402	NON-PROFIT
Prince William	10	II	URBAN	170	NON-PROFIT
Memorial Hospital Danvill	9	III	URBAN	506	NON-PROFIT
Potomac	9	II	URBAN	153	NON-PROFIT
Rappahannock General	9	V	RURAL	76	NON-PROFIT
Richmond Memorial	9	IV	URBAN	420	NON-PROFIT
Riverside	9	V	URBAN	576	NON-PROFIT
Warren Memorial	9	I	RURAL	151	NON-PROFIT
Wythe County Community	9	III	RURAL	106	NON-PROFIT
Chesapeake General	8	V	URBAN	260	HOSPITAL A
Johnston Memorial	8	III	RURAL	154	NON-PROFIT

Table D-4 (continued)

Facility	FY 1990 DMAS % Utilization	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
Maryview	8	V	URBAN	321	NON-PROFIT
Shenandoah County Mem	8	I	RURAL	129	NON-PROFIT
Stonewall Jackson	8	I	RURAL	130	NON-PROFIT
Arlington	7	II	URBAN	350	NON-PROFIT
Bath County Community	7	I	RURAL	25	NON-PROFIT
Gill Memorial E.E.N.T.	7	III	URBAN	40	PROPRIETAR
Mary Washington	7	I	RURAL	340	NON-PROFIT
Montgomery Regional	7	III	RURAL	146	PROPRIETAR
Page Memorial	7	I	RURAL	54	NON-PROFIT
Tazewell Community	7	III	RURAL	56	NON-PROFIT
Alleghany Regional	6	III	RURAL	204	NON-PROFIT
Culpeper Memorial	6	I	RURAL	96	NON-PROFIT
Jefferson Memorial	6	II	URBAN	120	PROPRIETAR
Loudoun Memorial	6	II	URBAN	123	NON-PROFIT
Mount Vernon	6	II	URBAN	235	COUNTY
Radford Community	6	III	RURAL	175	NON-PROFIT
Rockingham Memorial	6	I	RURAL	330	NON-PROFIT
The Alexandria Hospital	5	II	URBAN	414	NON-PROFIT
Augusta Community	5	I	RURAL	171	NON-PROFIT
Fairfax	5	II	URBAN	656	COUNTY
The Fauquier Hospital	5	I	RURAL	121	NON-PROFIT
Lynchburg General	5	III	URBAN	270	NON-PROFIT
Mem Hosp Mville-Henry Co.	5	III	RURAL	264	NON-PROFIT
Riverside Mid-Pen	5	V	URBAN	71	NON-PROFIT
Virginia Beach General	5	V	URBAN	274	NON-PROFIT
Winchester Medical Center	5	I	RURAL	356	NON-PROFIT
Bristol Memorial	4	III	URBAN	422	NON-PROFIT
Community Hosp Roanoke Va	4	III	URBAN	400	NON-PROFIT
Henrico Doctors	4	IV	URBAN	340	PROPRIETAR
Northern VA Doctors	4	II	URBAN	267	PROPRIETAR
Richmond Eye and Ear	4	IV	URBAN	60	NON-PROFIT
Chippenham	3	IV	URBAN	470	PROPRIETAR
Fair Oaks	3	II	URBAN	160	COUNTY, NO
Hospice of Northern VA	3	II	URBAN	15	NON-PROFIT
Lewis-Gale	3	III	URBAN	406	PROPRIETAR
Mary Immaculate	3	V	URBAN	110	NON-PROFIT
Riverside Tappahannock	3	V	RURAL	100	NON-PROFIT
Williamsburg Community	3	V	URBAN	139	NON-PROFIT
Johnston-Willis	2	IV	URBAN	292	PROPRIETAR
Martha Jefferson	2	I	URBAN	221	NON-PROFIT
National Orthopedic	2	II	URBAN	174	NON-PROFIT
Reston Hospital Center	2	II	URBAN	127	PROPRIETAR
Sentara Leigh General	2	V	URBAN	250	NON-PROFIT
St. Marys Richmond	2	IV	URBAN	401	NON-PROFIT
Stuart Circle	2	IV	URBAN	153	PROPRIETAR
Humana St. Lukes	1	IV	URBAN	200	PROPRIETAR
Retreat	1	IV	URBAN	230	NON-PROFIT
TOTALS	97				

Source: JLARC staff analysis of DMAS and Health Services Cost Review Council data. Includes acute care hospitals only.

Table D-5

Virginia Medicaid Outpatient Hospital Payments by Provider

Facility	FY 1990 Medicaid Payments	Percent Of Total Payments	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
MEDICAL COLLEGE OF VIRGINIA	$7,963,266.00	16.12651	IV	URBAN	1000	STATE
UNIVERSITY OF VIRGINIA	$6,075,535.00	12.30364	I	URBAN	579	STATE
CHIDLREN'S-KING'S DAUGHTERS	$1,891,449.00	3.830397	V	URBAN	132	NON-PROFIT
ROANOKE MEMORIAL HOSPITAL	$1,891,290.00	3.830075	III	URBAN	677	NON-PROFIT
SENTARA NORFOLK GENERAL HOSPITA	$1,432,992.00	2.90197	V	URBAN	644	NON-PROFIT
PORTSMOUTH GENERAL	$1,406,063.00	2.847436	V	URBAN	311	NON-PROFIT
RIVERSIDE REGIONAL CTR	$1,353,524.00	2.741039	V	URBAN	576	NON-PROFIT
DEPAUL	$1,278,483.00	2.589072	V	URBAN	402	NON-PROFIT
SENTARA HAMPTON GENERAL	$925,718.00	1.874683	V	URBAN	369	NON-PROFIT
SOUTHSIDE REGIONAL CTR	$814,400.00	1.649252	IV	URBAN	468	HOSPITAL AUTHORITY
FAIRFAX	$801,329.00	1.622781	II	URBAN	656	COUNTY
CHILDREN'S	$702,609.00	1.422862	IV	URBAN	36	NON-PROFIT
MEMORIAL OF DANVILLE	$640,498.00	1.297081	III	URBAN	506	NON-PROFIT
NORFOLK COMMUNITY	$630,848.00	1.277538	V	URBAN	202	NON-PROFIT
RICHMOND MEMORIAL	$627,425.00	1.270606	IV	URBAN	420	NON-PROFIT
LOUISE OBICI MEMORIAL	$611,263.00	1.237876	V	URBAN	243	NON-PROFIT
MARYVIEW	$589,594.00	1.193994	V	URBAN	321	NON-PROFIT
LYNCHBURG GENERAL	$585,868.00	1.186449	III	URBAN	270	NON-PROFIT
NEWPORT NEWS GENERAL	$582,492.00	1.179612	V	URBAN	126	NON-PROFIT
AUGUSTA COMMUNITY HOSPITAL	$544,048.00	1.101758	I	RURAL	171	NON-PROFIT
BRISTOL MEMORIAL HOSPITAL	$530,084.00	1.07348	III	URBAN	422	NON-PROFIT
HUMANA - CLINCH VALLEY	$529,839.00	1.072984	III	RURAL	200	PROPRIETARY
ARLINGTON	$527,927.00	1.069112	II	URBAN	350	NON-PROFIT
VIRGINIA BAPTIST	$502,382.00	1.01738	III	URBAN	328	NON-PROFIT
CHESAPEAKE GENERAL	$481,386.00	0.974861	V	URBAN	260	HOSPITAL AUTHORITY
MEM OF MARTINSVILLE & HENRY CO	$479,745.00	0.971538	III	RURAL	264	NON-PROFIT
MARY WASHINGTON	$478,642.00	0.969304	I	RURAL	340	NON-PROFIT
MOUNT VERNON	$443,295.00	0.897722	II	URBAN	235	COUNTY
POTOMAC	$434,350.00	0.879608	II	URBAN	153	NON-PROFIT
CHIPPENHAM	$419,512.00	0.849559	IV	URBAN	470	PROPRIETARY
PRINCE WILLIAM	$416,394.00	0.843245	II	URBAN	170	NON-PROFIT
ALEXANDRIA	$387,650.00	0.785035	II	URBAN	414	NON-PROFIT
JOHN RANDOLPH	$375,727.00	0.760889	IV	URBAN	150	HOSPITAL DISTRICT
NORTON COMMUNITY	$369,828.00	0.748943	III	RURAL	129	NON-PROFIT
PULASKI COMMUNITY	$362,912.00	0.734938	III	RURAL	153	NON-PROFIT
VIRGINIA BEACH GENERAL	$359,018.00	0.727052	V	URBAN	274	NON-PROFIT
NORTHAMPTON-ACCOMACK	$357,345.00	0.723664	V	RURAL	158	NON-PROFIT
LEE COUNTY COMMUNITY	$339,771.00	0.688075	III	RURAL	80	NON-PROFIT
COMM OF ROANOKE VALLEY	$326,622.00	0.661446	III	URBAN	400	NON-PROFIT
WINCHESTER MEDICAL CENTER	$320,079.00	0.648196	I	RURAL	356	NON-PROFIT
SOUTHAMPTON MEMORIAL	$308,102.00	0.623941	V	RURAL	221	NON-PROFIT
ROCKINGHAM MEMORIAL	$307,564.00	0.622852	I	RURAL	330	NON-PROFIT
SMYTH COUNTY COMMUNITY	$296,654.00	0.600758	III	RURAL	176	NON-PROFIT
LONESOME PINE	$292,380.00	0.592102	III	RURAL	60	NON-PROFIT
MARY IMMACULATE	$285,712.00	0.578599	V	URBAN	110	NON-PROFIT
SOUTHSIDE COMMUNITY	$284,784.00	0.57672	IV	RURAL	137	NON-PROFIT
HUMANA-BAYSIDE	$279,204.00	0.56542	V	URBAN	250	PROPRIETARY
RUSSELL COUNTY MEDICAL CTR	$276,032.00	0.558996	III	RURAL	78	PROPRIETARY

Table D-5 (continued)

Facility	FY 1990 Medicaid Payments	Percent Of Total Payments	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
MONTGOMERY REGIONAL	$273,386.00	0.553637	III	RURAL	146	PROPRIETARY
RICHMOND COMMUNITY	$271,076.00	0.548959	IV	URBAN	104	NON-PROFIT
RADFORD COUNTY COMMUNITY	$258,110.00	0.522702	III	RURAL	175	NON-PROFIT
JEFFERSON MEMORIAL	$256,738.00	0.519923	II	URBAN	120	PROPRIETARY
GREENSVILLE MEMORIAL	$249,373.00	0.505008	IV	RURAL	182	NON-PROFIT
HALIFAX-SOUTH BOSTON	$248,026.00	0.502281	IV	RURAL	192	NON-PROFIT
WILLIAMSBURG COMMUNITY	$238,836.00	0.48367	V	URBAN	139	NON-PROFIT
BUCHANNAN GENERAL	$236,687.00	0.479318	III	RURAL	94	NON-PROFIT
TWIN COUNTY COMMUNITY	$236,330.00	0.478595	III	RURAL	149	NON-PROFIT
LEWIS-GALE	$220,605.00	0.44675	III	URBAN	406	PROPRIETARY
RIVERSIDE MIDDLE PENNINSULA	$211,156.00	0.427615	V	URBAN	71	NON-PROFIT
SENTARA LEIGH HOSPITAL	$209,152.00	0.423556	V	URBAN	250	NON-PROFIT
ST MARY'S (RICHMOND)	$208,038.00	0.4213	IV	URBAN	401	NON-PROFIT
LOUDOUN MEMORIAL	$207,141.00	0.419484	II	URBAN	123	NON-PROFIT
COMMUNITY MEMORIAL	$196,751.00	0.398443	IV	RURAL	120	NON-PROFIT
RIVERSIDE TAPPAHANNOCK	$192,643.00	0.390124	V	RURAL	100	NON-PROFIT
JOHNSTON MEMORIAL	$187,804.00	0.380324	III	RURAL	154	NON-PROFIT
FAIR OAKS	$186,866.00	0.378425	II	URBAN	160	COUNTY
ST. MARY'S (NORTON)	$182,159.00	0.368892	III	RURAL	98	NON-PROFIT
WYTHE COUNTY	$172,949.00	0.350241	III	RURAL	106	NON-PROFIT
WISE APPALACHIAN	$170,243.00	0.344761	III	RURAL	67	NON-PROFIT
BEDFORD CO COMMUNITY	$160,452.00	0.324933	III	RURAL	166	NON-PROFIT
METROPOLITAN	$158,909.00	0.321809	IV	URBAN	180	PROPRIETARY
RAPPAHANNOCK GENERAL	$146,549.00	0.296778	V	RURAL	76	NON-PROFIT
WARREN MEMORIAL	$141,672.00	0.286902	I	RURAL	151	NON-PROFIT
CULPEPER MEMORIAL	$139,103.00	0.281699	I	RURAL	96	NON-PROFIT
JOHNSTON-WILLIS	$136,791.00	0.277017	IV	URBAN	292	PROPRIETARY
STONEWALL JACKSON	$134,127.00	0.271622	I	RURAL	130	NON-PROFIT
NORTHERN VIRGINIA DOCTORS	$132,078.00	0.267473	II	URBAN	267	PROPRIETARY
RICHMOND EYE & EAR	$131,181.00	0.265656	IV	URBAN	60	NON-PROFIT
FRANKLIN MEMORIAL	$129,030.00	0.2613	III	RURAL	62	NON-PROFIT
GILES MEMORIAL	$115,114.00	0.233119	III	RURAL	65	NON-PROFIT
FAUQUIER	$112,679.00	0.228188	I	RURAL	121	NON-PROFIT
RESTON HOSPITAL CENTER	$112,537.00	0.2279	II	URBAN	127	PROPRIETARY
MARTHA JEFFERSON	$102,185.00	0.206936	I	URBAN	221	NON-PROFIT
TAZEWELL COMMUNITY	$100,709.00	0.203947	III	RURAL	56	NON-PROFIT
HENRICO DOCTORS	$89,740.00	0.181734	IV	URBAN	340	PROPRIETARY
SHENANDOAH CO MEMORIAL	$89,518.00	0.181284	I	RURAL	129	NON-PROFIT
STUART CIRCLE	$88,184.00	0.178583	IV	URBAN	153	PROPRIETAR
NATIONAL HOSP. - ORTHO/REHAB	$82,334.00	0.166736	II	URBAN	174	NON-PROFIT
RETREAT	$65,044.00	0.131721	IV	URBAN	230	NON-PROFIT
HUMANA-ST. LUKE'S	$63,460.00	0.128514	IV	URBAN	200	PROPRIETARY
R J REYNOLDS/PATRICK COUNTY	$61,127.00	0.123789	III	RURAL	77	NON-PROFIT
GILL MEMORIAL EENT	$55,420.00	0.112232	III	URBAN	40	PROPRIETARY
PAGE MEMORIAL	$52,623.00	0.106568	I	RURAL	54	NON-PROFIT
ALLEGHANY	$26,413.00	0.053489	III	RURAL	204	NON-PROFIT
BATH COUNTY COMMUNITY	$17,288.00	0.03501	I	RURAL	25	NON-PROFIT
TOTALS 95	$49,379,970.00	100				

Source: JLARC staff analysis of DMAS hospital payment data.

Table D-6

Virginia Medicaid Outpatient Hospital Payments by Provider As a Percentage of Reported Net Patient Revenues

Facility	FY 1990 Medicaid Payments	Percent Of Net Patient Revenues	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
CHILDREN'S	$702,609.00	12.72	IV	URBAN	36	NON-PROFIT
NEWPORT NEWS GENERAL	$582,492.00	6.72	V	URBAN	126	NON-PROFIT
NORFOLK COMMUNITY	$630,848.00	6.24	V	URBAN	202	NON-PROFIT
RIVERSIDE TAPPAHANNOCK	$192,643.00	4.46	V	RURAL	100	NON-PROFIT
PORTSMOUTH GENERAL	$1,406,063.00	4.32	V	URBAN	311	NON-PROFIT
LEE COUNTY COMMUNITY	$339,771.00	3.80	III	RURAL	80	NON-PROFIT
MEDICAL COLLEGE OF VIRGINIA	$7,963,266.00	3.45	IV	URBAN	1000	STATE
CHIDLREN'S-KING'S DAUGHTERS	$1,891,449.00	3.42	V	URBAN	132	NON-PROFIT
LONESOME PINE	$292,380.00	3.35	III	RURAL	60	NON-PROFIT
GILES MEMORIAL	$115,114.00	2.89	III	RURAL	65	NON-PROFIT
FRANKLIN MEMORIAL	$129,030.00	2.71	III	RURAL	62	NON-PROFIT
UNIVERSITY OF VIRGINIA	$6,075,535.00	2.71	I	URBAN	579	STATE
RICHMOND COMMUNITY	$271,076.00	2.54	IV	URBAN	104	NON-PROFIT
PULASKI COMMUNITY	$362,912.00	2.50	III	RURAL	153	NON-PROFIT
WISE APPALACHIAN	$170,243.00	2.40	III	RURAL	67	NON-PROFIT
NORTHAMPTON-ACCOMACK	$357,345.00	2.27	V	RURAL	158	NON-PROFIT
GREENSVILLE MEMORIAL	$249,373.00	2.27	IV	RURAL	182	NON-PROFIT
NORTON COMMUNITY	$369,828.00	2.26	III	RURAL	129	NON-PROFIT
RADFORD COUNTY COMMUNITY	$258,110.00	2.21	III	RURAL	175	NON-PROFIT
RICHMOND EYE & EAR	$131,181.00	2.19	IV	URBAN	60	NON-PROFIT
RUSSELL COUNTY MEDICAL CTR	$276,032.00	2.12	III	RURAL	78	PROPRIETARY
DEPAUL	$1,278,483.00	1.94	V	URBAN	402	NON-PROFIT
SOUTHSIDE COMMUNITY	$284,784.00	1.93	IV	RURAL	137	NON-PROFIT
SOUTHAMPTON MEMORIAL	$308,102.00	1.93	V	RURAL	221	NON-PROFIT
LOUISE OBICI MEMORIAL	$611,263.00	1.88	V	URBAN	243	NON-PROFIT
SMYTH COUNTY COMMUNITY	$296,654.00	1.87	III	RURAL	176	NON-PROFIT
SENTARA HAMPTON GENERAL	$925,718.00	1.74	V	URBAN	369	NON-PROFIT
JOHN RANDOLPH	$375,727.00	1.73	IV	URBAN	150	HOSPITAL DISTRICT
RIVERSIDE MIDDLE PENNINSULA	$211,156.00	1.71	V	URBAN	71	NON-PROFIT
SOUTHSIDE REGIONAL CTR	$814,400.00	1.69	IV	URBAN	468	HOSPITAL AUTHORITY
ST. MARY'S (NORTON)	$182,159.00	1.59	III	RURAL	98	NON-PROFIT
TAZEWELL COMMUNITY	$100,709.00	1.51	III	RURAL	56	NON-PROFIT
MEM OF MARTINSVILLE & HENRY CO	$479,745.00	1.49	III	RURAL	264	NON-PROFIT
WARREN MEMORIAL	$141,672.00	1.45	I	RURAL	151	NON-PROFIT
MONTGOMERY REGIONAL	$273,386.00	1.42	III	RURAL	146	PROPRIETARY
HALIFAX-SOUTH BOSTON	$248,026.00	1.41	IV	RURAL	192	NON-PROFIT
HUMANA - CLINCH VALLEY	$529,839.00	1.38	III	RURAL	200	PROPRIETARY
WYTHE COUNTY	$172,949.00	1.37	III	RURAL	106	NON-PROFIT
RAPPAHANNOCK GENERAL	$146,549.00	1.34	V	RURAL	76	NON-PROFIT
STONEWALL JACKSON	$134,127.00	1.31	I	RURAL	130	NON-PROFIT
TWIN COUNTY COMMUNITY	$236,330.00	1.28	III	RURAL	149	NON-PROFIT
CULPEPER MEMORIAL	$139,103.00	1.27	I	RURAL	96	NON-PROFIT
BUCHANNAN GENERAL	$236,687.00	1.27	III	RURAL	94	NON-PROFIT
RIVERSIDE REGIONAL CTR	$1,353,524.00	1.22	V	URBAN	576	NON-PROFIT
COMMUNITY MEMORIAL	$196,751.00	1.20	IV	RURAL	120	NON-PROFIT
POTOMAC	$434,350.00	1.20	II	URBAN	153	NON-PROFIT
R J REYNOLDS/PATRICK COUNTY	$61,127.00	1.18	III	RURAL	77	NON-PROFIT

Table D-6 (continued)

Facility	FY 1990 Medicaid Payments	Percent Of Net Patient Revenues	Health Service Area	Urban/ Rural	Licensed Beds	Profit Status
MARY IMMACULATE	$285,712.00	1.17	V	URBAN	110	NON-PROFIT
MEMORIAL OF DANVILLE	$640,498.00	1.17	III	URBAN	506	NON-PROFIT
PRINCE WILLIAM	$416,394.00	1.13	II	URBAN	170	NON-PROFIT
RICHMOND MEMORIAL	$627,425.00	1.12	IV	URBAN	420	NON-PROFIT
PAGE MEMORIAL	$52,623.00	1.08	I	RURAL	54	NON-PROFIT
MARYVIEW	$589,594.00	1.07	V	URBAN	321	NON-PROFIT
CHESAPEAKE GENERAL	$481,386.00	0.92	V	URBAN	260	HOSPITAL AUTHORITY
WILLIAMSBURG COMMUNITY	$238,836.00	0.90	V	URBAN	139	NON-PROFIT
JOHNSTON MEMORIAL	$187,804.00	0.89	III	RURAL	154	NON-PROFIT
HUMANA-BAYSIDE	$279,204.00	0.87	V	URBAN	250	PROPRIETARY
BATH COUNTY COMMUNITY	$17,288.00	0.80	I	RURAL	25	NON-PROFIT
METROPOLITAN	$158,909.00	0.77	IV	URBAN	180	PROPRIETARY
SHENANDOAH CO MEMORIAL	$89,518.00	0.77	I	RURAL	129	NON-PROFIT
MARY WASHINGTON	$478,642.00	0.71	I	RURAL	340	NON-PROFIT
LOUDOUN MEMORIAL	$207,141.00	0.70	II	URBAN	123	NON-PROFIT
COMM OF ROANOKE VALLEY	$326,622.00	0.70	III	URBAN	400	NON-PROFIT
ROCKINGHAM MEMORIAL	$307,564.00	0.69	I	RURAL	330	NON-PROFIT
ARLINGTON	$527,927.00	0.66	II	URBAN	350	NON-PROFIT
FAUQUIER	$112,679.00	0.59	I	RURAL	121	NON-PROFIT
VIRGINIA BEACH GENERAL	$359,018.00	0.56	V	URBAN	274	NON-PROFIT
ALEXANDRIA	$387,650.00	0.47	II	URBAN	414	NON-PROFIT
WINCHESTER MEDICAL CENTER	$320,079.00	0.47	I	RURAL	356	NON-PROFIT
CHIPPENHAM	$419,512.00	0.43	IV	URBAN	470	PROPRIETARY
NORTHERN VIRGINIA DOCTORS	$132,078.00	0.43	II	URBAN	267	PROPRIETARY
RESTON HOSPITAL CENTER	$112,537.00	0.37	II	URBAN	127	PROPRIETARY
LEWIS-GALE	$220,605.00	0.35	III	URBAN	406	PROPRIETARY
STUART CIRCLE	$88,184.00	0.34	IV	URBAN	153	PROPRIETAR
MARTHA JEFFERSON	$102,185.00	0.32	I	URBAN	221	NON-PROFIT
NATIONAL HOSP. - ORTHO/REHAB	$82,334.00	0.28	II	URBAN	174	NON-PROFIT
ST MARY'S (RICHMOND)	$208,038.00	0.26	IV	URBAN	401	NON-PROFIT
RETREAT	$65,044.00	0.25	IV	URBAN	230	NON-PROFIT
HUMANA-ST. LUKE'S	$63,460.00	0.23	IV	URBAN	200	PROPRIETARY
JOHNSTON-WILLIS	$136,791.00	0.23	IV	URBAN	292	PROPRIETARY
ALLEGHANY	$26,413.00	0.11	III	RURAL	204	NON-PROFIT
HENRICO DOCTORS	$89,740.00	0.09	IV	URBAN	340	PROPRIETARY
82						
TOTALS	$41,780,054.00					

Note: Data shown are for individual hospitals for which net patient revenue data were available from the Health Services Cost Review Council. Data on net patient revenues for individual hospitals within hospital systems were not available for this analysis.

Source: JLARC staff analysis of Department of Medical Assistance Services data and Health Services Cost Review Council data.

Appendix E

FY 1990 Average Costs by Hospital Type

Hospital Type	Average Cost Per Adjusted Patient Day			Average Cost Per Adjusted Admission		
	Mean Cost	Lowest Cost	Highest Cost	Mean Cost	Lowest Cost	Highest Cost
ALL HOSPITALS (n=89)	**$ 579**	**$175**	**$1,232**	**$3,735**	**$1,739**	**$9,559**
HSA I (n=14)	$ 547	$261	$1,232	$3,473	$2,408	$9,530
HSA II (n=9)	768	608	948	4,671	3,241	7,083
HSA III (n=27)	507	282	672	3,127	2,207	4,671
HSA IV (n=19)	623	375	1,077	4,242	1,739	9,559
HSA V (n=20)	569	175	980	3,833	2,507	7,045
Rural (n=42)	$ 478	$175	$ 624	$2,954	$2,041	$3,597
Urban (n=47)	668	392	1,232	4,432	1,739	9,559
Rural (<100 beds n=14)	$ 517	$282	$624	$2,785	$2,207	$3,416
Rural (100-249 beds n=24)	450	175	618	$3,017	2,041	3,596
Rural (250-399 beds n=4)	512	450	559	$3,167	2,881	3,508
Urban (<100 beds n=3)	$ 794	$453	$1,077	$4,983	$1,739	$9,559
Urban (100-249 beds n=18)	670	486	908	4,228	2,606	7,083
Urban (250-399 beds n=10)	651	526	903	4,281	3,128	5,920
Urban (400 + beds n=10)	576	428	718	3,975	3,069	4,875
State teaching hospitals n=2	$1,063	$392	$1,232	$8,250	$6,971	$9,530
Hospital systems n=4	$ 645	$392	$ 828	$4,551	$3,667	$4,939
Non-profit (n=75)	$ 562	$175	$1,232	$3,628	$1,739	$9,558
Proprietary (n=14)	663	499	948	4,304	2,798	5,920

Source: JLARC staff analysis of Virginia Health Services Cost Review Council data.

Appendix F

Summary of Terms of Hospital Settlement Agreement

(1) The Commonwealth must establish a payment adjustment fund, which is to be financed with State and matching federal dollars for fiscal years 1993 through FY 1996. Virginia must place $5 million into the fund the first effective year, $10 million the second year, $15 million the third year, and $20 million the fourth year. Funds are to be dispersed to hospitals as additional reimbursement using the methodology outlined in the settlement agreement.

(2) Effective July 1, 1992, DMAS is to adjust upward the DRI-VA inflation factor used to increase hospital ceiling payments by adding two percentage points. This increase is to be considered an escalation factor (to account for an increase in the use and intensity of hospital services).

(3) The Commonwealth is to amend the State Plan to make the necessary changes to the reimbursement system, to seek federal approval, and to make the necessary budget requests.

(4) The VHA is to dismiss the Medicaid litigation, unless DMAS fails to amend the State Plan, fails to obtain budget authorization, or there is a breech of the agreement. Nothing prohibits the VHA from bringing suit upon the expiration of the terms of the agreement.

(5) DMAS is not to attempt to circumvent the settlement agreement through reductions to non-State owned hospital reimbursement or take actions which increase non-State owned hospital Medicaid service obligations. Also the Commonwealth cannot reduce SLH or Indigent Care Trust Fund payments to circumvent the agreement. (The Commonwealth may restructure the programs however).

(6) If a reduction in reimbursement due to revenue shortfall is required, it must be proportional among State and non-State hospitals. This must be done in a manner which enables non-State hospitals to reduce their costs of serving Medicaid patients in proportion to corresponding reimbursement reductions. If it cannot be implemented in this way, then such reductions are limited to one year. If revenue shortfalls persist beyond a year, reductions must be proportional to reductions required of all other State agencies.

(7) All hospitals involved in the lawsuit are to be bound by the agreement.

(8) All hospital appeals held in abeyance as a result of the lawsuit, and which have not proceeded to the level of informal fact-finding conference, are to be dropped.

(9) A joint task force holding members from both parties is to be established no later than January 1995 to "consider amendments to the State Plan to take effect after 6/30/96" regarding reimbursement.

(10) In the absence of any amendments to the State Plan for the Commonwealth's fiscal years after 1996, the Payment Adjustment Fund is to be continued at the level established in 1996.

Appendix G

Percent of Medicaid Costs Reimbursed by Each State

According to an analysis by the U. S. Prospective Payment Assessment Commission, Virginia reimburses 77 percent of costs. The following is a list of all other states.

State	Percent Reimbursed
Alabama	84%
Alaska	85
Arizona	108
Arkansas	67
California	66
Colorado	67
Connecticut	72
Delaware	86
Florida	82
Georgia	72
Hawaii	75
Idaho	87
Illinois	56
Indiana	97
Iowa	94
Kansas	79
Kentucky	85
Louisiana	84
Maine	93
Maryland	104
Massachusetts	82
Michigan	80
Minnesota	88
Mississippi	93
Missouri	70
Montana	97
Nebraska	74
Nevada	72
New Hampshire	87
New Jersey	102
New Mexico	78
New York	89
North Carolina	69
North Dakota	96
Ohio	86
Oklahoma	74
Oregon	59
Pennsylvania	66
Rhode Island	94
South Carolina	69
South Dakota	93
Tennessee	93
Texas	66
Utah	65
Vermont	73
Virginia	77
Washington	77
West Virginia	85
Wisconsin	80
Wyoming	89

Appendix H

Other States' Hospital Reimbursement Systems

Table H-1 provides a summary of other state's inpatient hospital reimbursement systems. Table H-2 is a summary of each state's outpatient hospital reimbursement system.

Table H-1

Other States' Hospital Reimbursement Systems

STATE	METHOD	UNIT	TRENDING	STANDARDS	BASE YEAR	START DATE
Alabama	Trended Base with Peer	Per Diem	DRI Marketbasket	Lower of hopital's trended rate of peer group ceiling	Prior Year	July 1986
Alaska	Base Trended	Global (Percentage of Charges)	Determined as part of rate setting/budget review process	Hospital-specific	1985	July 1987
Arkansas	Cost-Based	Cost	N/A	N/A	N/A	Reinstated 1991
California	(a) Negotiated (b) Cost-to-Peer-and-Trend Limit	(a) Per diem (b) Cost with per discharge limit	(a) Negotiation (b) HCFA update	(a) N/A (b) Limited by peer group trend	(a) Prior year (b) 1980	February 1983
Colorado	Flat Rate by Group (DRG)	Per case	CPI	Peer group percentile ceilings limit hospital specific rates	1987	July 1988
Connecticut	Cost-to-Trend Limit	Cost with per discharge limit	HCFA update	Hospital-specific	1982	October 1982
Delaware	Cost-Based	Cost	N/A	N/A	N/A	No change
District of Columbia	Cost-to-Trend Limit*	Cost with per discharge limit	Negotiated	Hospital-specific	1982	October 1983
Florida	Base Trended	Per diem	DRI Marketbasket	County ceilings limit hospital-specific rates	Prior year cost reports	July 1981

Table H-1 (continued)

STATE	METHOD	UNIT	TRENDING	STANDARDS	BASE YEAR	START DATE
Georgia	Base Trended	Per case	DRI Marketbasket	Hospital-specific	1988	January 1983
Hawaii	Base Trended	Per diem	DRI Marketbasket	Hospital-specific	1987	October 1985
Idaho	Cost-to-Trend Limit	Cost with per diem limit	DRI Marketbasket	Hospital-specific	1984	July 1987
Illinois	(a) Negotiated (b) Trended Base with Peer	(a) Per diem (b) Per diem	(a) N/A (b) DRI	(a) N/A (b) Peer ceiling	(a) Prior year (b) _____	July 1986
Indiana	Cost-to-Trend Limit	Cost with per discharge limit	HCFA update	Hospital-specific	1982	1983
Iowa	Flat Rate by Group (DRG)	Per case	Legislatively determined	50/50 state/hospital-specific blend	1988	October 1987
Kansas	Flat Rate by Group (DRG)	Per case	Determined as part of budget process	Peer groups	1989	July 1989
Kentucky	Trended Base with Peer	Per diem	DRI Marketbasket	Lower of hospital's trended rate or peer group ceiling	Most recent cost report	March 1982
Louisiana	Cost-to-Trend Limit	Cost with per discharge limit	HCFA update	Hospital-specific	1983-84	October 1982
Maine	Base Trended	Global (Per discharge)	HCFA update DRI index	Gross revenue limit	1981	July 1981
Maryland	Base Trended	Per case	Internal indices plus 2% intensity	Peer group	Varied	1977
Massachusetts	Base Trended	Global	Ratesetting formula	Hospital-specific	1987	1982

Table H-1 (continued)

STATE	METHOD	UNIT	TRENDING	STANDARDS	BASE YEAR	START DATE
Michigan	Flat Rate by Group (DRG)	Per case	Greater of HCFA Update or 75% DRI Marketbasket	Hospital-specific rates are limited by a "truncated mean"	1988-89	February 1985
Minnesota	Flat Rate by Group (DRG)	Per case	DRI Marketbasket	Hospital-specific	1981	August 1985
Mississippi	Trended Base with Peer	Per diem	DRI Marketbasket	Lower of hospital's own trended rate of 80th percentile of peer group ceiling	Most recent cost reports	July 1981
Missouri	Cost-to-Trend Limit	Cost with per diem limit	Negotiated	Hospital-specific	Rolling base 3 years prior	October 1981
Montana	Flat Rate by Group (DRG)	Per case	State defined, needs legislative approval	Statewide	1985	October 1987
Nebraska	Base Trended	Per diem	HCFA Update	Hospital-specific	1982	July 1982
Nevada	Flat Rate by Group (Non-DRG)	Per case, per diem	HCFA update	Peer groups	Most recent cost report	September 1988
New Hamphshire	Flat Rate by Group (DRG)	Per case	None	Statewide; some peer	Most recent cost report	January 1989
New Jersey	Flat Rate by Group (DRG)	Per case	Internally developed indices, proxies	Peer groupings, trend increases and DRG rates	1988	January 1980
New Mexico	Flat Rate by Group (DRG)	Per case	HCFA Update	Lower of peer group ceilings or hospital's own rate	1987	October 1989

Table H-1 (continued)

STATE	METHOD	UNIT	TRENDING	STANDARDS	BASE YEAR	START DATE
New York	Flat Rate by Group (DRG)	Per case	Determined by panel of independent health economists	Hospital-specific and peer blend	1981	January 1988
North Carolina	Base Trended	Per diem	State defined	Hospital-specific	1981	November 1981
North Dakota	Flat Rate by Group (DRG)	Per case	Medicaid determines update	Peer group budget neutrality	1984	July 1987
Ohio	Flat Rate by Group (DRG)	Per case	DRI Marketbasket	Peer group	Not available	October 1984
Oklahoma	Trended Base with Peer	Per diem	Lesser of DRI Marketbasket and HCFA Update	Hospital-specific, peer, and statewide	1988-89	October 1990
Oregon	(a) Flat Rate by Group (DRG) (b) Cost-based	(a) Per case (b) Cost	(a) HCFA update (b) N/A	(a) Statewide ceiling (b) N/A	(a) 1987 (b) N/A	October 1985
Pennsylvania	Flat Rate by Group (DRG)	Per case	DRI Marketbasket	Hospital-specific	Pending (See Synopsis)	July 1991
Rhode Island	Negotiated	Global (Ratio cost-to-charges)	Negotiated	Hospital-specific subject to statewide maxicap	Most recent cost report	January 1973
South Carolina	Flat Rate by Group (DRG)	Per case and per diem	HCFA Update	Hospital-specific	1987	January 1986
South Dakota	Flat Rate by Group (DRG)	Per case	State update subject to approval by governor	Hospital-specific	1987	January 1985

Table H-1 (continued)

STATE	METHOD	UNIT	TRENDING	STANDARDS	BASE YEAR	START DATE
Tennessee	Base Trended	Per diem	ProPAC Update	Hospital-specific	1988	October 1983
Texas	Flat Rate by Group (DRG)	Per case	Lesser of TEFRA target or HCFA Update	Hospital-specific	1988	September 1986
Utah	Flat Rate by Group (DRG)	Per case	CPI	Blend of hospital-specific and statewide	Not Available	July 1983
Vermont	Negotiated	Per diem	None	Subject to available state-appropriated funds	Most recent charge data	October 1984; October 1982
Virginia	Trended Base with Peer	Per diem	DRI Marketbasket plus 2% intensity	Peer group ceilings	Prior year cost reports	July 1982
Washington	(a) Negotiated DRG (b) Cost-based DRG	Per case	(a) None (b) HCFA update	(a) N/A (b) Limited by peer medians	1985	April 1988
West Virginia	Cost-based	Cost	N/A	N/A	N/A	No change
Wisconsin	Flat Rate by Group (DRG)	Per case	Legislatively determined	Statewide, some peer	N/A	January 1991
Wyoming	Cost-based	Cost	N/A	N/A	N/A	No change

Source: Abt Associates, Medicaid Payment Methodologies for Inpatient Hospital Services, August 1991.

Table H-2

Other States' Outpatient Reimbursement Systems

State	Types of Systems									
	Reported Allowable Costs	Established Rate by Procedure	Prospective Payment	Charged Based	Negotiated Rate	Percentage of Charges	Fee for Service	Maximum Reimbursement Screen	Same As Non-hospital Providers
Alabama		•	•						
Alaska			•						
Arizona			•	•					
Arkansas				•					
California				•	•				
Colorado				•		80%			
Connecticut			•				•		
Delaware				•					
Florida				•			•		
Georgia				•					
Hawaii			•		•				
Idaho				•			•		
Illinois				•				•	
Indiana			•	•					
Iowa				•			•		
Kansas									•

Table H-2 (continued)

State	Reported Allowable Costs	Established Rate by Procedure	Prospective Payment	Charged Based	Negotiated Rate	Percentage of Charges	Fee for Service	Maximum Reimbursement Screen	Same As Non-hospital Providers
Kentucky				•		65%			
Louisiana		•		•			•	•	
Maine			•	•					
Maryland			•	•			•		
Massachusetts			•	•			•		
Michigan				•				•	
Minnesota				•					•
Mississippi						75%			
Missouri						60%	•		
Montana	•								
Nebraska			•	•					
Nevada				•			•		
New Hampshire				•					
New Jersey				•					
New Mexico						80%			
New York	•		•				•		
North Carolina	80%								
North Dakota				•					

Table H-2 (continued)

State	Reported Allowable Costs	Established Rate by Procedure	Prospective Payment	Charged Based	Negotiated Rate	Percentage of Charges	Fee for Service	Maximum Reimbursement Screen	Same As Non-hospital Providers
Ohio				•					
Oklahoma	20% of Inpatient			•			•		
Oregon	•								
Pennsylvania				•			•		
Rhode Island	•		•		•				
South Carolina			•	•			•		
South Dakota				•					
Tennessee				•					
Texas	•			•			•		
Utah						70%	•		
Vermont				•					
Washington	•		•				•		
West Virginia							•		•
Wisconsin				•					
Wyoming				•					

Source: JLARC staff analysis of 1992 Commerce Clearinghouse, Inc., Medicare and Medicaid Guide.

Appendix I

Comparison of Services Between Virginia and Other States

As part of this JLARC review, the hospital services covered by Virginia Medicaid were compared to those covered by other states' Medicaid programs. A list of limits on services that Virginia and other states place upon inpatient hospital services is included in Table I-1. Table I-2 provides specifics on what outpatient services are limited by Virginia and those that are limited by other states. Lastly, Table I-3 is a list of the other states that require recipient co-payments for hospital services.

Table I-1

SERVICES IN STATE MEDICAID INPATIENT PROGRAMS
Comparison of Services Provided and Limits between Virginia and other States

TYPE OF INPATIENT HOSPITAL SERVICE

	Length of Stay	Kidney Transplant	Liver Transplant	Bone Marrow Transplant	Cornea Transplant	Bone Transplant
Number of States that Allow the Service Without Limits	36*	13	4	5	17	3
Number of States that Allow the Service With Limits	13	19	33	28	16	13
VIRGINIA (Impose limit?)	Yes (21 days)	Yes (Prior authorization)	Yes (Not covered)	Yes (Not covered)	No (Allowed)	Yes (Not covered)
Types of Limits on Services Other States Use	-Per year -Per stay -Prior authorization -Patient activity study percentiles	-Type of disease -Prior authorization -Monetary	-Type of disease -Prior authorization -Monetary -Age -Number of days	-Prior authorization -Monetary -Age -Number of days	-Prior authorization	-Prior authorization -Age

* Do not limit to set number of days or do not limit.

Table I-1 (continued)

	TYPE OF INPATIENT HOSPITAL SERVICE					
	Semi-Private Room	Jaw Repair	Gastric Bypass	Renal Transplant	Heart Transplant	OB-GYN
Number of States that Allow the Service Without Limits**	0	0	0	4	3	0
Number of States that Allow the Service With Limits	11	2	5	12	25	3
VIRGINIA (impose limit?)	Yes (Semi-private room only)	?	?	Yes (Not covered)	Yes (Not covered)	Yes (Follow federal regulations)
Types of Limits on Services Other States Use		-Prior authorization -Age	-Prior authorization -Two states do not allow procedure	-Prior authorization	-Prior authorization -Number of days -One state does not allow procedure	

** If zero (0), states did not limit specifically or mention service in their plans.

Table I-1 (continued)

TYPE OF INPATIENT HOSPITAL SERVICE

	Multiple Organ Transplant	Sun/Mon Discharge	Experimental Procedures	Cosmetic Surgery	Acupuncture	Drug Alcohol Rehab
Number of States that Allow the Service Without Limits**	0	0	0	0	0	0
Number of States that Allow the Service With Limits	6	1	10	12	3	2
VIRGINIA (impose limit?)	Yes (Not covered)	Yes (Not allowed)	Yes (Not covered)	Yes (Not covered)	Yes (Not covered)	Yes (Not covered)
Types of Limits on Services Other States Use	-Prior authorization -Heart/Lung -Pancreas/ kindney -No triple organ			-Prior authorization -Seven states do not allow procedure		-One state does not allow procedure

** If zero (0), states did not limit specifically or mention service in their plans.

Table I-1 (continued)

TYPE OF INPATIENT HOSPITAL SERVICE

	Elective Procedure	Preoperative Days	Out-of-State Care	Diet Therapy	Pancreas Transplants	Other Limits
Number of States that Allow the Service Without Limits**	0	0	0	0	1	0
Number of States that Allow the Service With Limits	3	5	4	1	2	4
VIRGINIA (impose limit?)	Yes (Prior authorization)	Yes (One day)	No (Allowed)	?	Yes (Not covered)	
Types of Limits on Services Other States Use	-Prior authorization -Sterilization -EPSDT		-Prior authorization -Emergency		-Prior authorization	-Will cover private room -Monetary

** If zero (0), states did not limit specifically or mention service in their plans.

Table I-1 (continued)

	TYPE OF INPATIENT HOSPITAL SERVICE						
	Skin Transplant	Surgical Procedure	Biofeedback	Fertility	Fri/Sat Admission	Services to Older Mental Patients	Psychiatric Services for Children
Number of States that Allow the Service Without Limits**	2	0	1	6	7	26	29
Number of States that Allow the Service With Limits	12	6	0	0	0	14	10
VIRGINIA (Impose limit?)	Yes (Not covered)	Yes (Some must be outpatient)	?	?	Yes (Not allowed)	No (Allowed)	Yes (Not covered)
Types of Limits on Services Other States Use	-Prior authorization	-Prior authorization -Place of Service	-No abortions -Sterilization -Hysterectomy -Infertility -2nd opinion -Sex change			-Include categorically needy only	-Include categorically needy only

** If zero (0), states did not limit specifically or mention service in their plans.

Table I-2

SERVICES IN STATE MEDICAID OUTPATIENT PROGRAMS
Comparison of Services Provided and Service Limits between Virginia and other States

TYPE OF OUTPATIENT HOSPITAL SERVICE

	Number of Visits	Prior Authorization	Amount of Payment	Routine Annual Physical	Immunization	Cosmetic Surgery
Number of States that Allow the Service With Limits	15	13	2	6	1	8
VIRGINIA (impose limit?)	No	No	No	Yes	Yes	Yes

Table I-2

TYPE OF OUTPATIENT HOSPITAL SERVICE

	Elective Surgery	Emergency Room	Out-of-State Care	Dietary Supplement	Fertility	Experimental Procedures	Other Limits
Number of States that Allow the Service With Limits	2	5	4	1	2	4	3
VIRGINIA (Impose limit?)	Yes	Yes	No	?	?	Yes	

Source: JLARC staff anlaysis of 1992 Commerce Clearinghouse, Incorporated Medicare and Medicaid data and 1991 HCFA Medicaid Services State by State.

Table I-3

States that Require Recipient Co-Payments for Hospital Services

Alabama	—	$50 inpatient, $3 outpatient
Arizona	—	$5 for some inpatient procedures, $1 outpatient
California	—	$1 outpatient
Colorado	—	$15 inpatient, $3 outpatient
Kansas	—	$25 inpatient, $1 outpatient
Mississippi	—	$5 per day for inpatient, $2 outpatient
Missouri	—	$10 inpatient, $2 outpatient
Montana	—	$3 per day up to $66 inpatient, $1 outpatient
North Carolina	—	$1 outpatient
Pennsylvania	—	$3 per day up to $21 inpatient, sliding scale up to $3 for outpatient
South Dakota	—	$2 inpatient, $2 outpatient
Virginia	**—**	**$100 inpatient, $2 outpatient**
Wisconsin	—	$3 per day up to $75 inpatient, $3 outpatient

Appendix J

Agency Response

As part of JLARC's data validation process, the Governor's Secretaries and State agencies involved in a study effort are given the opportunity to comment on an exposure draft of the report. Appropriate technical corrections resulting from the comments have been made in this version of the report. This appendix contains the response of the Department of Medical Assistance Services.

COMMONWEALTH of VIRGINIA

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September 11, 1992

Mr. Philip Leone, Director
Joint Legislative Audit and
Review Commission
General Assembly Building
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Richmond, Virginia 23219

Dear Mr. Leone:

We have reviewed the exposure draft, Review of Virginia Medicaid in Hospitals, are pleased with the overall report and concur with most of the recommendations. As requested, we have provided attachments with proposed comments and changes.

We appreciate your staff's efforts to understand and explain the complexity of hospital costs and reimbursement and hope that you will find our suggestions helpful.

Sincerely,

Bruce U. Kozlowski

BUK/pfp

Attachments

Comments Concerning the JLARC Draft:
"REVIEW OF VIRGINIA MEDICAID IN HOSPITALS"

1. Page 117, Last Paragraph

Based on the Department's review of the six hospitals that may have been overreimbursed for fiscal years ending in 1986 and 1987, the potential amount is $715,000 in General Funds (GF) ($1.4 million total funds) of which the University of Virginia Hospital (UVA) represents $666,000 in GF ($1.3 million total funds). However, based on the Departments review of the subsequent years' cost report settlements for the UVA, the method used to settle the 1988 through 1990 cost reports did not remove the cost of Graduate Medical Education (GME) before comparison to charges. After these cost reports are corrected, the $666,000 in GF due the Department for 1986 and 1987 will be eliminated. In addition, the Department also reviewed seven additional hospitals identified in the JLARC Exposure Draft. The potential overreimbursement for fiscal years ending in 1986 through 1990 is $202,000 in GF ($404,000 total funds) of which a children's hospital represents $174,000 in GF ($348,000 in total funds). However, the Department will have to determine if any GME cost should be removed for the children's hospital before comparison to charges.

2. Page 118, 1st Paragraph

Based on the Department's review of the application of the Lower of Cost or Charge principle (LCC), we have determined the following:

The Health Care Finance Administration (HCFA) did not amend the LCC regulations until 1988 to require separate determination of the LCC limit between inpatient and outpatient services. The requirements were retroactively applied to fiscal years beginning on or after October 1, 1984. Therefore, no hospital with a fiscal year ending prior to September 30, 1985 would be impacted by this change.

HCFA subsequently amended the LCC regulations in 1989 to exclude GME cost for the purposes of comparison with customary charges for fiscal years beginning on or after July 1, 1985.

The Department, since 1982, has followed the Medicare principles of reimbursement for determination of allowable costs for both inpatient and outpatient costs unless the State Plan or Federal Regulations require different methods.

When the Medicare regulations were changed retroactively in 1988, the Department became concerned about the adverse impact the new LCC rule on outpatient services would have on those hospitals with large indigent outpatient clinics, especially UVA and one large children's hospital. In addition, the Department was concerned regarding the retroactive application of the new rule upon not only the VHA law suit but upon another suit in Federal Court regarding the retroactive application of the elimination of Return on Equity as mandated by the 1987 General Assembly.

For these reasons, the Department elected to apply the new LCC rule prospectively but not retrospectively.

3. Page 121 1st Paragraph

There are no State Plan regulations that establish time frames for the Department to settle cost reports and establish rates for hospitals and therefore no requirement for public regulatory changes. The Department has internal policies and procedures that establish required time frames for the settlement and rate setting for hospitals. The policy has been changed to 180 days and we are in the process of issuing a Medicaid Memorandum to all providers, including hospitals, communicating these changes.

4. Page 124 1st Paragraph

Federal regulations at 42 CFR 413.13(g)(1) specifically mandate that, for cost reporting periods beginning before October 1, 1984, the reasonable costs of services and the customary charges for these services are to be aggregated. Section 413.13(g)(2) mandates that, for cost reporting periods beginning on or after October 1, 1984, the aggregate method may not be used and the costs and charges are to be compared separately.

The Department is not aware of any federal law or regulation which would permit a different interpretation by either the HCFA staff or the JLARC staff.

5. Page 125 Last Paragraph

As discussed in the JLARC report on pages 121 and 122, the Department performs two types of audits, a desk audit and a field audit. The desk audit is referred to as a "Cost Settlement" and a field audit is referred to as a "Final Settlement." Either type of settlement requires that a Notice of Program Reimbursement be sent to the Provider. If a subsequent field audit is not performed for a given fiscal year, the desk audit becomes a defacto "Final Settlement."

The collectability of any overreimbursement is governed by federal regulations (42 CFR 405.1885) which prohibits any cost report reopening after three years from the date of the last Notice of Program Reimbursement letter.

6. Page 126 Recommendation (13)

The Department agrees with the JLARC recommendation in part. We agree that an immediate review should be completed to determine: (1) which hospitals may have been overreimbursed, (2) the amount of overreimbursement, and (3) the collectability of all identified overreimbursements. However, we recommend that only the hospital cost reports for fiscal years beginning on or after October 1, 1984 through 1987 should be reviewed. As previously stated, the Department has no regulatory authority based on federal law or regulations to apply the separate LCC method prior to that date.

7. Page 127 Exhibit 2 item 5 and 6 Findings and Further Action Needed

Based on the Department's review of the hospitals audited by the Medicare Intermediary, Blue Cross and Blue Shield of Virginia (BC/BS), in the past three federal fiscal years, 77 percent (23 of 30) of the hospitals that received the highest reimbursement from Medicaid have been audited by BC/BS. In addition, of the top five hospitals with the highest Medicaid reimbursement, all five have been audited in the last two federal fiscal years.

Limited scope audits are conducted by BC/BS for areas that are most important to Medicare for potential savings, i.e. outpatient, capital and GME cost. These same areas are the highest priority for the Department also, and as noted in the report, have saved the Medicaid Program significant dollars. Also, as noted, the Department has begun a review of those hospitals that do not participate in the Medicare Program and will be auditing those that we determine have potential for saving to the Medicaid Program.

8. Page 130 2nd and 3rd Paragraph

Federal regulations, at 42 CFR 405.1803 and 405.1835, define a reasonable period of time for issuing notices of amount of program reimbursement as within 12 months of receiving an acceptable cost report.

Due to provider's selection of fiscal year ends, approximately 42 percent of the total annual cost reports are received during the second calendar quarter each year and an additional 29 percent of the cost reports are received during the fourth calendar quarter.

It would not be cost effective for the Department to add additional cost settlement staff to meet a seasonal workload. For this reason, the Department elected to extend the allowable cost settlement periods into the lower workload periods during the third and first calendar quarters.

In addition, the delay in establishing higher per diem rates produces an increase in revenue for the Commonwealth due to the interest earned on the unexpended funds. Some States have adopted a deliberate policy to delay rate setting or claims payment, e.g. Illinois, to improve the State's cash flow. This practice has been recently upheld in Federal Court.

9. Page 130 Recommendation (14)

The Department suggests that JLARC reconsider this recommendation since we do not believe it will be cost effective. This will cost the Commonwealth the interest earned on the unexpended funds and may require the Department to increase staff to expedite the cost settlement and rate setting for hospitals.

10. Page 131 Last Paragraph

Based on the Department's review of the top five hospitals that received the highest Medicaid reimbursement, all five have been audited in the last two Federal fiscal years. In addition, 77 percent of the hospitals that receive the highest reimbursement from Medicaid have been audited by BC/BS in the last three Federal fiscal years.

As previously noted, the Department has begun a review of those hospitals that do not participate in Medicare and will be auditing those hospitals determined to have potential saving to the Medicaid Program.

11. Page 134 First Paragraph

The BC/BS estimate of 300 to 350 audit hours to complete an average hospital audit is almost certainly based upon their experience in conducting the limited scope audits discussed earlier in the JLARC report. To audit hospital operating costs, the Department will require significantly increased audit hours and costs over the JLARC estimate. The Department will address the anticipated cost/benefit ratios in the budget addenda submitted in response to recommendation (15).

12. Page 135 Last Paragraph

From the 1990 audit conducted by the APA, they recommended and the Department developed an overview document that explained the cost settlement and rate setting process for each of the different provider groups, including hospitals. During the 1991 audit performed by the APA, an extensive review of the cost settlement and rate setting process, including the regulations, policies and procedures, was completed and all previous finding by the APA and IA were cleared regarding how the cost settlement and rate determination is completed and documented.

13. Page 135 Recommendation (16)

Based on the Department's review, we currently have regulations, policies and procedures in place for the automated cost settlement and audit record keeping. The Department concurs with the recommendation that the data should be updated periodically to reflect the most recent information available for cost reporting periods from 1990 forward.

14. Page 144 Exhibit 4

The following correction should be made:

Sterilization for male and female adults.

15. Page 158 Recommendation (18)

Virginia Medicaid is developing with Blue Cross and Blue Shield of Virginia, a pilot concurrent review component in addition to its existing prepayment utilization review function for inpatient hospital stays.

16. Page 160 Recommendation (19)

The prepayment utilization review of outpatient hospital care to the extent recommended in the report, will require additional nurse staffing.

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