INTERIM REPORT:

Review of
Inmate Dental Care

A Report in a Series
on Inmate Health Care
INTERIM REPORT OF THE
JOINT LEGISLATIVE
AUDIT AND REVIEW COMMISSION

Review of Inmate Dental Care

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

HOUSE DOCUMENT NO. 52

COMMONWEALTH OF VIRGINIA
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Preface

While the United States Supreme Court has established that health care is a Constitutional right of inmates, the courts have not ruled on what are acceptable limits for that care. Therefore, questions remain concerning the appropriate level and quality of inmate health care.

Item 15 of the 1992 Appropriation Act directed JLARC to examine the increasing cost of inmate health care and to determine the appropriate levels of that care. This interim report on dental care is the first report in a series which will address the mandate. Future reports will examine mental health treatment, medical care, and the organization and management of inmate health within the Department of Corrections.

The Virginia Department of Corrections was appropriated $29.7 million in fiscal year 1992 to provide health care to an inmate population which totaled 17,007 on June 30 of that year. The department uses these funds to provide inmates health care either in correctional institutions, in community hospitals, from private physicians and dentists, or at the Medical College of Virginia.

Central office involvement in health care appears to be fairly limited, as the majority of budgetary and procedural decisions are made at the institutional and regional levels. Systematic, descriptive information on inmate health care is not collected or maintained by central office staff. The lack of information hampers efficient and effective planning and oversight of both the quality and cost of inmate health care.

Internal staffing resources may need to be increased to produce cost efficiencies in dental care. However, the department should ensure that any increases result in increased productivity and decreased reliance on private dentists.

On behalf of JLARC staff, I would like to thank the director and the staff of the Department of Corrections for their cooperation and assistance during the course of this review.

Philip A. Leone
Director

January 19, 1993
The United States Supreme Court ruled in the late 1970s that inmates have a Constitutional right to health care. While the Court's decision was directed at medical care, it is recognized that inmates' health care rights also include mental health treatment and dental care. Questions remain, however, concerning the appropriate level and quality of inmate health care.

In fiscal year (FY) 1992, the Virginia Department of Corrections (DOC) was appropriated approximately $29.7 million to provide health care to an inmate population which totalled 17,007 on June 30 of that year. The department's appropriation funds health care provided inmates either in correctional institutions, in community hospitals, from private physicians and dentists, or at the Medical College of Virginia.

Health care services within the 37 major institutions and field units are provided by more than 335 full time employees of the department and additional contract personnel, when necessary. In addition, the department employs five staff, who are assigned to the Office of Health Services (OHS) in the central office, on either a full- or part-time basis.

The department has a decentralized approach to inmate health care which results in budgetary and procedural decisions being made at the institutional and regional levels. Central office staff lack systematic, descriptive, statewide information about many aspects of inmate health care. The lack of information hampers the effectiveness of the central office in controlling both the cost and the quality of inmate health care. Rather, central office staff act primarily as advisors to correctional health care staff working in the facilities.

Item 15 of the 1992 Appropriation Act directs JLARC to examine the increasing costs of health care in corrections and to determine the appropriate level of that care. This report is an interim report on inmate health care. The focus of this report is on the dental care provided inmates. Future reports will address mental health care, medical care, and the organization and management of inmate health.
Department Policies and Procedures Need to Be Revised

Central office staff, particularly the chief dentist, are responsible for developing departmental policies and operating procedures. The departmental operating procedure for dental care addresses many important issues. Given the changing composition and needs of the inmate population, however, revisions are necessary to ensure that the procedure provides adequate direction for dental care. Further, central office staff acknowledge that each institution and field unit should have developed institutional operating procedures (IOPs) for dental care. However, only ten of the 37 major institutions and field units provided JLARC staff with a copy of their dental IOPs when requested.

Therefore, the following recommendations are made:

- **DOC should revise Department Operating Procedure 716 to include areas which should help ensure that access to quality dental care is being provided to all inmates, including those with special needs.**

- **DOC should ensure that all institutions and field units develop and disseminate IOPs for dental services.**

Dental-Specific Cost Data Should Be Centrally Maintained and Reviewed

OHS staff do not adequately monitor and control dental care costs. Since DOC does not have a cost reporting system that effectively isolates dental care costs from mental health or medical care, the department has been unable to adequately justify the funding of additional dental positions.

DOC should isolate the costs of the various types of health care. One of the ways the department could do this is by establishing individual “cost centers” dedicated to each of the major areas of inmate health care. In addition, the department should ensure, by issuing detailed definitions and instructions to all staff involved in coding expenditures, that the coding of the various sub-object codes is correct and that sub-object codes designated for specific types of dental services are exclusively dedicated to those expenditures. Subsequently, DOC could better identify areas for cost savings.

Further, while OHS staff monitor funds for inpatient health care, no other dental care and oral surgery costs are monitored. As a result, cost comparisons of dental care alternatives are not available. Central office oversight of comprehensive, meaningful cost data would enable the department to take cost containment actions and make more informed budgetary decisions.

Therefore, the following recommendations are made:

- **DOC should promulgate detailed instructions regarding the coding of dental, mental health, and medical expenditures at the sub-object level.**

- **DOC should establish cost centers which differentiate dental care expenditures from mental health and medical expenditures.**

- **DOC should ensure that dental care cost data are reviewed by the central office at least quarterly. The cost data should be used in evaluating alternative means of providing dental care and in recommending cost containment actions.**

Dental Care Service Provision Should Be More Adequately Monitored

The number and type of dental care services provided within DOC institutions are reported on a monthly basis on depart-
ment "morbidity reports." However, the morbidity reports do not provide valid dental service information because there is no standard definition of what the categories on the report represent or what constitutes a patient visit. Since this manual report cannot be used to monitor dental care provision, OHS lacks valid information concerning these services.

Therefore, the following recommendations are made:

- **DOC should develop a standardized morbidity report form with meaningful service categories.** Specific definitions of what services are to be reported and how they are to be reported, including what constitutes a patient visit, should be determined.

- **DOC should consider establishing a computerized database into which each institution could directly enter medical service data.** The central office should then use these data to analyze workload differences and to monitor service delivery.

Dental Care Should Receive Additional Oversight

As noted previously, central office staff are involved in establishing general policies related to inmate dental care. Questions regarding specific problem situations are often referred to the chief dentist. However, OHS should have a stronger role in four areas of dental care service delivery.

First, the department has no written policy or procedure which covers the provision of dental care to field unit inmates. OHS' coordination of dental care service delivery for field unit inmates could minimize the use of private dentists and ensure that dental care staffing and equipment are productively used.

Second, inmate referrals for treatment by a medical specialist are reviewed and approved by the chief physician or chief dentist, if the request involves oral surgery. However, no similar approval is required for inmates to see a private dentist if the dental services to be provided are not related to special needs (in addition to oral surgery, special needs include dental treatment for hemophiliacs and cardiac patients). OHS should take a more active role to ensure that private dentists are used only when more cost-effective alternatives are not available.

Third, the number of referrals made to private dentists' offices are not monitored, nor are correctional institutions required to report on those services. OHS should monitor the use of private dentists, including the reasons for their use, the dental procedures that were completed, and the associated costs.

Fourth, annual operational reviews frequently fail to mention the dental care services that are provided. OHS should review dental services as part of the annual operational review of medical services. These reviews should involve using dental staff in completing the reviews, interviewing dental staff as part of the reviews, and sending a written report to the institution's dentist.

Therefore, the following recommendation is made:

- **DOC should ensure that OHS takes a more active role in directing and overseeing dental care provision.**

Chief Dentist Should Devote More Time to Administrative Duties

The chief dentist position was created with the expectation that the chief dentist would devote approximately 50 percent of his time to statewide administration of dental services. The other 50 percent would be spent providing dental care to inmates at Powhatan Correctional Center. However, due to pressing dental care needs and staffing vacancies at Powhatan, the chief dentist has not devoted 50 percent of his time to
administrative duties. The inability of the chief dentist to devote the necessary time to perform these duties seems to have contributed to deficiencies in the monitoring of dental services. Therefore, the following recommendation is made:

- To assist in addressing the oversight and monitoring needs of the dental program, the chief dentist should devote 50 percent of his time as needed on the statewide administrative duties specified in the position description.

Internal Resources Should Be Increased For Better Cost Effectiveness

Since the number of dentists employed by DOC has not kept up with increases in inmate population, the use of private dentists has increased, and in turn, the dental care costs that can be estimated have also increased. Care by a private dentist is typically more costly than care provided in an institution. This may partially explain why dental care costs on a per-inmate basis appear to be increasing.

An additional staffing problem is the insufficient number of dental hygienists, dental assistants, and oral surgeons that are employed. The failure to staff sufficient numbers of hygienists and assistants has resulted in dentists performing duties that could be more cost-effectively provided by hygienists or assistants. The failure to employ any oral surgeons has meant that most oral surgeries must be referred to private surgeons.

The department requested additional staffing for both the 1990-1992 and 1992-1994 biennia. However, Department of Planning and Budget staff did not approve the requests because of budget constraints and DOC's inability to provide anything other than anecdotal cost data concerning the consequences of not receiving the staffing.

Equipment and facility limitations provide additional efficiency constraints. Due either to limited resources or an inability to expand facilities, several major institutions have only one dental operatory. Dental clinics with only one operatory encounter delays which limit efficient provision of dental services.

Therefore, the following recommendations are made:

- DOC should systematically collect and maintain service and cost data to be used in evaluating and supporting the need for additional dental staff.

- DOC should prepare a dental care staffing plan that links increased staffing with improved productivity and decreased reliance on private dentists.

- As part of the dental staffing plan, DOC should delineate alternative means of meeting the oral surgery needs of inmates.

- In conjunction with the development of the dental care staffing plan, DOC should address the cost effectiveness of expanding or establishing specific dental clinics and purchasing additional dental equipment to allow major institutions and field units to treat additional inmates more cost effectively.

Inmate Access to Dental Care Should Be Examined by the Department

As noted previously, the department may have dental staffing and equipment needs. However, the department could better manage its current staff and equipment.
The department has failed to develop any written guidelines which direct where within the system services are to be provided and which treatment needs are to be taken to private dentists. Consequently, access to dental care is generally limited for field unit inmates.

Formal written guidelines outlining which major institutions will provide dental services for field units and how many field unit inmates will be treated should improve the equity of dental care access. Further, increased staffing at institution dental clinics could improve dental care access while providing cost savings by decreasing field units' private dental expenses.

Therefore, the following recommendations are made:

• **DOC should make it a priority to hire full-time staff for the dental clinic at the Botetourt field unit.** The department should allow contract positions to be hired to provide dental care at the Botetourt field unit until full-time positions can be established and filled.

• **As part of the development of the dental staffing plan, DOC should develop formal written guidelines which clearly delineate where inmates residing in facilities without dental clinics will receive dental treatment.**

• **As part of the development of the dental staffing plan, DOC should determine the costs and benefits of adding staff to existing DOC dental clinics to help ensure improved access to dental care while providing cost savings by decreasing private dental expenses.**
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Overview of Inmate Health Care</td>
<td>1</td>
</tr>
<tr>
<td>JLARC Review</td>
<td>4</td>
</tr>
<tr>
<td>II. INMATE HEALTH CARE IN VIRGINIA</td>
<td>7</td>
</tr>
<tr>
<td>Cost of Inmate Health Care</td>
<td>7</td>
</tr>
<tr>
<td>Organization of Inmate Health Services</td>
<td>12</td>
</tr>
<tr>
<td>Inmate Dental Care Services</td>
<td>16</td>
</tr>
<tr>
<td>III. DENTAL CARE SERVICES</td>
<td>23</td>
</tr>
<tr>
<td>Central Office Oversight and Monitoring of Dental Care</td>
<td>23</td>
</tr>
<tr>
<td>Cost of Dental Care</td>
<td>36</td>
</tr>
<tr>
<td>Access to Dental Care</td>
<td>44</td>
</tr>
<tr>
<td>APPENDIXES</td>
<td>51</td>
</tr>
</tbody>
</table>
I. Introduction

Inmate health care has three distinct components: dental care, mental health treatment, and medical care. For fiscal year (FY) 1992, the Department of Corrections was appropriated approximately $29.7 million to provide health care to an inmate population which totalled 17,007 on June 30 of that year.

Item 15 of the 1992 Appropriation Act directs JLARC to examine the increasing costs of health care in corrections and to determine the appropriate level of inmate health care. The mandate further directs JLARC to develop mechanisms to restrain the growth of costs for inmate health care.

This report is an interim report on inmate health care. The focus of this report is on the dental care provided inmates. Other reports will review mental health care, medical care, and the organization and management of inmate health care.

OVERVIEW OF INMATE HEALTH CARE

The legal question of whether inmates should receive health care was answered by the Supreme Court in the late 1970s when it held that inmates have a Constitutional right to care. However, questions about the level and quality of that care still remain, and answers to these questions have not been fully addressed by the courts.

Professional associations have gotten involved in inmate health issues by developing and disseminating standards for correctional health care programs. Courts have been reluctant to establish what are acceptable standards but have determined what are unacceptable practices and violations of Constitutional rights.

While this activity has led to some general information and guidance about quality of care for inmate medical needs, the difficult decisions regarding what care to provide and how to provide that care must be made by corrections health care staff and administrators. Decreasing State budgets, coupled with increasing inmate populations, have led many states to try and address the question of how much treatment is too much.

Several states are examining existing ways to systematically make treatment decisions. For example, California and North Carolina are reported to be using many of their state Medicaid guidelines to make treatment decisions for inmates. At this time, federal courts have not ruled on the constitutionality of this rationale for restricting the treatment available to inmates.

It is anticipated that the inmate population of the 1990s will have increasing health needs. Nationally, the population is getting older, sentences are getting longer, and more women are coming into the corrections system. Further, although the evidence
is anecdotal due to lack of comprehensive data, some correctional experts think that more inmates are entering the system in poor health and in need of special health treatment.

**Legal Issues**

In 1976, the Supreme Court held in its decision in *Estelle v. Gamble*, 429 U.S. 98, 97 S.Ct.285 (1976), that the government is obligated to “provide medical care to those whom it is punishing by incarceration.” According to the Court decision, failure to provide timely access to medical care violates inmates’ Constitutional rights under the Eighth Amendment prohibition against cruel and unusual treatment.

The Court held, as had many lower federal and state courts, that the infliction of unnecessary suffering is inconsistent with contemporary standards of decency. The decision further stated that indifference to pain by either “prison doctors in their response to prisoners’ needs or by prison guards in intentionally denying or delaying access to medical care or intentionally interfering with the treatment once prescribed” is a violation of the Constitutional rights of inmates.

Virginia inmates have brought more than 175 cases, alleging Constitutional rights violations, against the Department of Corrections (DOC) in the last two years. At this time, 121 (69 percent) of the 175 cases are still open. One case was settled against the State, as the court found that the department had denied an inmate access to care for a real medical complaint which resulted in the inmate’s death. The court awarded the inmate’s family a $140,000 settlement.

**Standards for Inmate Health Care**

Professional associations have also examined the conditions of prison health care. Unlike the courts, the associations have developed sets of prescriptive standards. Compliance with the standards is voluntary. It is widely acknowledged that accredited facilities usually provide better quality care than those that are not accredited. However, none of the accreditation standards have been cited in litigation as sufficient to ensure adequate inmate health care.

Four professional associations have developed fairly general but comprehensive sets of standards. The sets of standards have different foci which reflect the different philosophies of the professions involved in correctional health care. The associations are:

- American Correctional Association (ACA),
- American Public Health Association (APHA),
- Joint Commission on Accreditation of Healthcare Organizations (JCAHO), and
- National Commission on Correctional Health Care (NCCHC).
In addition, other professional associations, such as the American Nurses' Association and the American Psychiatric Association, have developed standards within their particular areas of expertise.

Correctional systems, as well as individual correctional institutions, can be accredited by complying with the standards. Accreditation is awarded when an institution or a statewide system meets the mandatory standards. While the number and content of the mandatory standards differ, general areas are addressed and include:

- management concerns such as legal obligations, ethical issues, documentation needs, quality assurance activities, and safety and environmental issues;

- service delivery including personnel, space, and equipment;

- service provision including emergency care, intake procedures, sick call, specialty services, infirmary care, management of communicable diseases, mental health, dental, and other special needs; and

- support services including laboratory and radiology, pharmacy, nutrition, medical records, and education services.

At this time, one Virginia facility is accredited. The Marion Correctional Treatment Center received JCAHO accreditation this year.

Treatment Issues

While the courts have directed that inmates receive care and standards have been developed which set certain minimum requirements for adequate care, State correctional systems must set limits for treating inmates on a case-by-case basis. The courts have not yet provided direction on these limits. Therefore, correctional administrators are somewhat vulnerable in making these decisions. Compared to the spectrum of care that is available to the non-incarcerated public it is not clear what level of care should be accessible to inmates. Treatment decisions are further complicated by the rising costs of health services and decreasing State budgets to deal with them.

Nationally, statistics indicate that inmates are getting older, more inmates with physical disabilities are coming into correctional systems, and increasing numbers of women are being incarcerated. Therefore, corrections systems are increasingly having to deal with special population inmates with special health needs. Inmates with special health needs include those with communicable diseases, chronic medical conditions, the physically handicapped, geriatric offenders, and the terminally ill. In addition, the increasing numbers of women also present special health needs. According to noted authorities on inmate health care, meeting the needs of these special populations may well represent a future crisis for corrections health care.

The special needs of inmates with serious, chronic medical conditions, terminal illnesses, or physical handicaps impact other aspects of their care. Policy questions
concerning how special population inmates should be housed and what programs should be available to them often present tradeoffs in terms of cost versus accessibility. In dealing with terminally ill inmates, compassion and the reality of substantial health care costs must be balanced against the need to protect the public and enforce judicial sentences. Many states are struggling with these issues as inmate populations present more extensive treatment needs at a time when state budgets are being reduced.

JLARC REVIEW

Item 15 of the 1992 Appropriation Act directs JLARC to:

examine the increasing costs of inmate health care in the state correctional system. The objective of this study will be to determine the appropriate level of inmate health care while developing mechanisms for restraining the growth of costs.

The mandate goes on to state that the Commission shall report on its progress to the 1993 General Assembly and to each succeeding session until its work is completed. This report is an interim report which focuses primarily on the dental care component of inmate health care.

Study Issues

Three major study issues were developed to address the study mandate as it pertains to dental care. The issues were:

* to determine if access to adequate dental care services is provided to inmates,
* to determine the major cost components of inmate dental care services, and
* to evaluate if the Department of Corrections provides inmate dental care services in a cost-effective manner.

It was not possible to fully address the second issue — identifying the major cost components of dental care — in this interim report. Dental services expenditures are not differentiated from medical or mental health services by the department. Therefore, it was not possible to isolate expenditures for dental services at this time. Since the majority of both appropriations and expenditures are thought to be for medical activities, this issue will be more fully addressed in a subsequent JLARC report on inmate medical care.

Research Activities

A number of research activities were undertaken to address the dental care issues. These activities included mail surveys, site visits, analysis of expenditure data, analysis of morbidity reports, and document reviews.
Mail Surveys. JLARC staff conducted three surveys of department employees. These included two surveys of dental care and nursing personnel. One survey covered dental services provided, and another collected information on how morbidity reports are completed. The third survey was administered to business managers to determine medical cost reporting.

The survey on dental services was mailed to the dental clinic at the major institutions (except James River Correctional Center, where there is no established dental clinic) and one nurse at each field unit and James River Correctional Center. Southampton Reception and Classification, Southampton Intensive Treatment Center, and Powhatan Reception and Classification were mailed field unit surveys; however, the nurses responded as if the facilities were the same as the major institutions associated with them. Responses from these facilities which duplicated responses from the major institutions were not used. All 40 surveys were completed and returned, resulting in a response rate of 100 percent.

The survey concerning morbidity report completion also had a response rate of 100 percent. The questions were designed to facilitate analysis of the department's morbidity reports.

The questionnaire on medical cost reporting was sent to the business managers at the major institutions and the accountants within the four regional offices regarding field unit expenditures. All 20 questionnaires were completed and returned, resulting in a response rate of 100 percent. The questionnaire asked the business managers to indicate which expenditure codes they would use in certain situations, how often their coding procedures have changed, and how much was spent by their institution or region on off-site private dental services during FY 1992.

Site Visits. Site visits were conducted at six prisons. Greensville Correctional Center and Powhatan Correctional Center were selected because they have the largest dental clinics and staffing complements. The Virginia Correctional Center for Women was chosen because it is the only women's institution and the department is considering contracting out its dental and medical care. Augusta Correctional Center was picked on the basis of reports that Augusta seems to provide dental care efficiently with less staff. St. Brides Correctional Center was selected due to knowledge of facility limitations and relatively high demand for dental services. Finally, the Botetourt field unit was chosen because it is a large unit, it spent large amounts on private dental care in FY 1992, and it has assembled an on-site dental clinic. During the visits, JLARC staff toured the dental clinics, conducted interviews with dental staff, and reviewed inmate files.

Analysis of Expenditure Data. JLARC staff analyzed data from the State’s Cost Accounting and Reporting System (CARS) for fiscal years 1988-1992. The purpose of the analysis was to isolate dental expenditures, to the extent possible.

Analysis of Morbidity Reports. The department provided JLARC with monthly morbidity reports for January 1989 through April 1992. The purpose of the review was to determine reporting consistency and the extent of duplication, and to determine whether the reports could be used for workload analysis.
**Document Reviews.** Numerous documents and reports were reviewed during the course of the study. These included department operating procedures relating to health care, department contracts with Southside Medical Systems, Inc., and ARA Health Services, Inc., relevant court case documents, and standards for prison health care developed by professional organizations.

**Future Reports**

The remaining reports in the JLARC series on inmate health care will examine medical and mental health services and the organization and management of health care within the Department of Corrections. In accordance with the intent of the mandate, the reports on medical and mental health services will focus on the following:

- determining the reasons for increasing inmate health care costs,
- identifying what types of care may be inappropriate to provide, and
- recommending strategies for containing costs.

The report on organization and management of inmate health care will focus on how the Department of Corrections can better control costs while maintaining quality care.

**Report Organization**

This chapter has provided a brief overview of inmate health care and the JLARC review. Chapter II describes the provision of inmate health care within Virginia with a special focus on dental care. Chapter III presents study findings regarding inmate dental care within the Virginia Department of Corrections.
II. Inmate Health Care in Virginia

Inmates in Virginia can receive health care either in correctional institutions, in community hospitals, from private physicians and dentists, or at the Medical College of Virginia (MCV). On June 30, 1992, 137 DOC inmates were receiving treatment in correctional medical beds; 277 inmates were receiving mental health treatment in correctional mental health beds; six were in State hospitals; and five were receiving treatment in the security ward at MCV. Data on the number of inmates receiving dental treatment are not maintained by the department.

The cost of inmate health care has risen steadily over the last four years. The department's health care appropriation includes funds for medical care as well as dental care and mental health treatment. As such, the expenditures for the components of health care cannot be accurately isolated or readily determined.

The organization of DOC's health care services is consistent with the traditional structure in which central office staff act as advisors to health care staff working within the institutions. The department's Office of Health Services includes five professional staff who provide support to the more than 335 health care workers located within the department's 37 major institutions and field units.

COST OF INMATE HEALTH CARE

Appropriations for inmate health care, like all corrections-related funding, have been steadily increasing for some time. DOC administrators cite a number of reasons for the requested increases including the growth in health care costs in general; the presence of more serious medical problems related to an aging inmate population; and a larger number of expensive health care treatments for AIDS, organ transplants, and so forth. Since statewide data concerning inmate health care expenditures are limited, much of DOC's evidence is anecdotal in nature.

DOC has a decentralized system of inmate health care resulting in budgetary and procedural control being exercised at the institutional and regional levels. Descriptive information about the care provided is also maintained at the institutional level (except for the care provided by hospitals and providers outside the corrections system). This lack of descriptive, statewide information hampers efforts to substantiate the need for health care appropriations, to effectively control health care costs, and to plan for the future.
Appropriations and Expenditures

Appropriations for health care expenses have increased from $21 million in FY 1989 to $32 million for FY 1994 (Table 1, opposite page). While the total appropriation for the Department of Corrections was increased by 33 percent during that time period, the appropriation for health care services was increased by 52 percent. As a percentage of the total appropriation, health care increased from 6.6 percent in FY 1989 to 7.6 percent for FY 1994. Examining the appropriations for health care expenses on a per-inmate basis shows an increase from $1,716 in FY 1989 to $1,782 in FY 1992 (Table 2, below). According to DOC staff, the substantial increase for FY 1991 was partially due to funding for medical equipment associated with the opening of Greensville Correctional Center.

Table 2

Department of Corrections' Health Care Appropriations*
Fiscal Years 1989 - 1992

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<td>$1,716</td>
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*Appropriations are expressed in millions of dollars.


Table 3 (page 10) compares the health-related funds appropriated by the General Assembly with the funding and expenditures reported by DOC. As shown, for fiscal years 1989 through 1992 the department's expenditures for health care were less than the amount appropriated by the General Assembly except for fiscal years 1990 and 1992. In FY 1990, expenditures exceeded appropriations by approximately $2 million. For FY 1992, expenditures exceeded appropriations by approximately $4.7 million. When expenditures exceed appropriated funding, funds from other sub-programs or programs within DOC must be transferred to health care. DOC staff expect to have another shortfall in health care funding in FY 1993 unless they are able to reduce spending.
Table 1

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<td>Central Office</td>
<td>$3,839,116</td>
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<td>$4,677,461</td>
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<td>$5,835,012</td>
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<td>Major Institutions</td>
<td>15,345,966</td>
<td>17,991,555</td>
<td>25,900,109</td>
<td>22,063,409</td>
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<td>Field Units</td>
<td>1,799,499</td>
<td>1,864,110</td>
<td>2,775,103</td>
<td>2,801,353</td>
<td>2,844,720</td>
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<td>Health Care Total</td>
<td>20,984,581</td>
<td>23,723,278</td>
<td>33,352,673</td>
<td>29,708,653</td>
<td>30,129,744</td>
<td>31,982,771</td>
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<td>Total Appropriation*</td>
<td>$317,094,162</td>
<td>$355,819,804</td>
<td>$383,870,079</td>
<td>$405,537,294</td>
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Health Care as a % of Total Appropriation: 6.6% 6.7% 8.7% 7.3% 7.5% 7.6%

*For fiscal years 1989 and 1990 all appropriations specifically for Youth Services programs were subtracted in determining the department total.

Table 3

Appropriation, Funding, and Expenditures for Inmate Health Care
Fiscal Years 1989 - 1992

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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriated Funding</td>
<td>$20,984,581</td>
<td>$23,723,278</td>
<td>$33,352,673</td>
<td>$29,708,653</td>
</tr>
<tr>
<td>DOC-Reported Funding</td>
<td>$22,050,792</td>
<td>$25,943,126</td>
<td>$30,737,076</td>
<td>$32,276,701</td>
</tr>
<tr>
<td>Expenditures</td>
<td>$20,068,707</td>
<td>$25,748,524</td>
<td>$31,282,455</td>
<td>$34,383,298</td>
</tr>
</tbody>
</table>

Note: DOC-reported funding includes funds transferred from other programs to meet shortfalls in health care.


Indirect Costs for Health Care Not Included. Although appropriation and expenditure data should capture most of the direct costs related to health care, there are sizable indirect costs that are not captured. The primary indirect costs involve the additional salary and benefit expenditures required for corrections officers to guard inmates when they are outside the institution. A minimum of two corrections officers must accompany inmates when they go to a health care appointment or are hospitalized outside the institution. These security-related costs are not reflected in health care cost data.

Role of Central Office

DOC has a decentralized health care system which relies primarily on institutional staff to determine and request the majority of their budgetary needs — contract positions; medical supplies; pharmaceuticals; outside expenses such as physician’s fees, laboratory and x-ray costs; and so forth. Central office planning for health care appears to be limited to determining the number of full-time equivalent positions and the type of equipment needed within the facilities.

Further, there is no centralized computer database containing descriptive health care information. Data concerning the type of care being provided at the institutions are generally not computerized and when they are, the data are kept at the institution and are not readily accessible to the central office. Although central office is connected by computer to all of the institutions, central office does not have the capability to receive and use computerized health care data. The absence of a centralized database, which could be used for system-wide planning, has exacerbated the effect of decentralization on planning.
The only data received by central office staff from the institutions are contained on hard-copy Medical Services Morbidity Reports. Generally, the morbidity report submitted by most institutions includes:

- the number of inmates seen at sick call, including the number of hospital referrals to MCV or a local hospital;
- the number and type of ancillary services provided, including x-ray or laboratory examinations, optometric services, prescriptions filled by the central pharmacy or locally, and ambulatory referrals made; and
- the number and type of dental services such as extractions, dentures, root canals, and cleanings completed.

Central office staff also have a limited role in directing how health care funds are spent. Institutional staff generally control how health care funds are spent. Medical, dental, and mental health funding are all contained within the sub-program medical and clinical services. This provides additional flexibility for institutional staff and less control by central office.

Perhaps because of the lack of comprehensive, historical data on inmate health care, DOC has made few attempts to statistically project what future health care costs are likely to be. The chief physician recently projected the number of beds that will be needed for special health care needs through FY 2001. The physician began by surveying institutions to get baseline figures for June 1991. Many of the projections were then made based on national trend data since historical, Virginia-specific data were not available. Other projections simply involved increasing the number of cases in the current population by the percentage increase expected in the overall inmate population. The chief physician’s projections show a significant increase in each category of special bed type, with the total number of beds increasing by more than 300 percent from 426 to 1,319.

Cost Containment Initiatives

Virginia, like many other states, has attempted to deal with the medical needs of an increasing inmate population during budget constraints. The department has recently begun to have outside review of non-emergency treatment procedures and to contract for health care with private health providers.

Outside Review of Medical Procedures. In 1989, DOC contracted to have the Medical Society of Virginia Review Organization (MSVRO) assist in establishing additional cost controls over medical care. MSVRO is a not-for-profit organization which has been federally designated as the Peer Review Organization for Virginia. As such, its mission is to “serve as the utilization and quality control peer review organization for Virginia.” MSVRO’s contract with DOC is one of several that it has with various State agencies. Under its contract, MSVRO performs three primary cost containment functions for DOC:
• conducting length of stay reviews for inmates receiving inpatient care at MCV facilities;

• providing second opinion reviews for procedures, which have been denied by the DOC chief physician, that are to be performed outside DOC institutions; and

• conducting cost audits of hospital care charges which are referred to MSVRO by the DOC health services administrator.

Privatization of Health Care. DOC has been using private physicians to provide certain services on a contract basis for quite some time. Recently, the department began contracting with a private company for all health care at the Greensville Correctional Center. This effort was seen as a pilot program to examine the feasibility of expanding contractual inmate health care.

The Greensville contract provides staffing and services for an 80-bed mental health unit and a 40-bed infirmary/hospital. According to the health services administrator, Greensville has a total of 91.675 full-time equivalent (FTE) medical positions, of which 75.675 FTEs are employees of the contractor, ARA Services, and 16 are State employees.

ORGANIZATION OF INMATE HEALTH SERVICES

The organization of DOC's health care services is consistent with the traditional structure that the majority of corrections systems had at one time. Health care staff are located within each major institution, field unit, and the central office of the Department of Corrections (Figure 1). Health care staff at the institutional level typically report to either the warden or assistant warden within the major institutions, or the superintendent or assistant superintendent within the field units. Central office staff indicated that regional staff primarily oversee budgetary questions and respond to the questions and concerns of wardens and superintendents. Central office health care staff stated that they generally act in an advisory capacity and do not have line authority over institutional health care staff.

Central Office Staff

Four primary programs are under the supervision of the Chief of Operations for Programs in the central office. Two of these programs, health services and mental health, are considered to be related to health care by DOC administrators.

The health services administrator indicated that his primary responsibilities relate to defining and budgeting for the medical needs of the inmates in DOC's custody. The four professional staff members who assist the health services administrator include
Figure 1

Organization of Health Care Within the Department of Corrections

Source: JLARC staff graphic based on Department of Corrections organizational chart.
the chief physician, the chief pharmacist, the chief dentist, and the registered nurse manager B.

The chief physician, chief dentist, and registered nurse manager B are involved in the development of departmental policies and operating procedures related to the provision of medical, dental, and nursing care. The chief physician and chief dentist also approve requests for consultations with specialists outside the department and for all non-emergency surgeries and hospital admissions.

The chief pharmacist and five other staff are employed in the central pharmacy which purchases drugs in bulk and subsequently supplies the institutions and field units. The cost of operating the pharmacy is included as a surcharge in billing institutions for the drug "purchases."

The position of the mental health program director is relatively new as it was created in 1986. The director develops budget requests, provides training, monitors the provision of mental health treatment, and provides clinical direction to staff as needed. Sex offender treatment is not considered to be a function of mental health services and is therefore overseen by the inmate program services director rather than the mental health director. Similarly, oversight of substance abuse services is provided by the substance abuse services director or the inmate program services director, depending on whether the services are funded by a federal grant or not.

Staff within the Major Institutions and Field Units

Health care staff in correctional institutions provide dental, mental health, and medical services to inmates. Major institutions and field units have sick call for inmates with dental and medical problems. Most major institutions also have a limited number of beds that can be used for inmates who have minor medical problems. Six major institutions have specialized medical or mental health beds which allow for the care of more serious problems (Figure 2). A total of 110 medical beds are located in three major institutions and a security ward at MCV. Three hundred and twenty-eight mental health beds are located in six major institutions. Dental care is provided at major institutions, with inmates housed in field units being treated at major institutions or by dentists within the community.

As of January 9, 1992, a total of 338.5 health care positions had been established within the department's 37 major institutions and field units. However, not all of these established positions are filled at any given time.

In addition to these staff, contract positions are used in major institutions and field units if a full-time position is not needed or the institution is unable to hire for the position in a reasonable period of time. According to the health services administrator, the department always tries to fill full-time positions with State employees rather than contract staff. The one exception to this practice would involve the health care staff employed by the private contractor at Greensville Correctional Center.
Figure 2

Location of Correctional Health Care Beds

KEY

- Medical Beds
- Mental Health Beds
- Medical and Mental Health Beds

Staunton Correctional Center
75 mental health beds

Powhatan Correctional Center
80 medical beds
12 mental health beds

Marion Correctional Center
119 mental health beds

Greensville Correctional Center
42 medical beds
62 mental health beds

Medical College of Virginia Security Ward
15 medical beds

Source: JLARC staff graphic.
INMATE DENTAL CARE SERVICES

It is generally recognized by the courts that an inmate's right to medical care includes dental care. Courts have ruled that prison dental care should provide services necessary to relieve pain and to restore proper functions. However, it has not been ruled that correctional clinics are required to provide complete state-of-the-art dentistry or the full range of services available to the free population.

The Department of Corrections provides access to dental care for inmates in major institutions and field units. The department has 15 dental clinics operating within the 16 major institutions. Currently, the department does not operate dental clinics in any of the field units.

While all dental clinics provide services to inmates in their own facilities, several dental clinics also provide services to one or more field units (Figure 3). DOC does not maintain data which can be used to determine the number of inmates treated by the dental clinics. Therefore, JLARC staff estimated the number of inmates served by each dental clinic based on the inmate populations of the facilities that the clinic reported it serves. These numbers represent the potential population to be served, not the actual number of inmates seen by the dentists. Using this methodology, the number of inmates who could be served by the dental clinics ranges from 228 at Marion Correctional Center to 2,410 at Powhatan Correctional Center. Inmates may also receive dental care from outside private dentists, if necessary.

Department operating procedures (DOPs) generally outline the type of dental treatment that is to be provided to inmates and the procedures inmates should follow to file grievances if these policies are not followed. Institutional operating procedures (IOPs) further define the dental treatment to be provided for inmates within facilities.

DOC-employed dentists, contract dentists working in DOC dental clinics, and private dentists provide the dental services. These services include emergency dental service, examinations, restorations (fillings), extractions, root canals, oral surgery, and teeth cleaning.

Dental staff and equipment vary among institutions. Each DOC dental clinic has at least one dentist, although not all the dentists work full-time. Dental staff within DOC institutions may be State-employees or contract personnel. Each dental clinic has at least one dental operatory, with the majority of clinics having more than one operatory. A dental operatory is generally a dental chair and supporting equipment such as a light, dental unit, cabinet and sink.

DOC does not have a budget for internal dental services because it is combined with the medical budget. Expenditures for outside private dental services reported by facility and region business managers indicate a total of $482,064 was spent during FY 1992.
Dental Treatment

Inmate dental care begins with screening during reception and classification. Inmates must request dental care to receive any additional treatment. Treatment is provided according to priority and availability of time.
**Dental Screening.** The dental needs of each inmate are determined as part of medical screening during reception and classification. The dental classification system includes the following codes:

- **A** - No restorative treatment needed
- **AB1** - Minor restorative treatment needed
- **AB2** - Major restorative treatment needed

However, assignments to facilities are not made based on dental needs classification. Also, the department does not maintain dental classification data in a manner which can be easily accessed.

During reception and classification, inmates are informed of their dental care needs and how they may request necessary treatment. Department policy does not require formal treatment plans. However, charting is required to indicate items such as missing teeth, existing restorations and teeth to be extracted. Written policy requires that following screening, instruction in oral hygiene should be provided and within seven days of admission dental health education should be given. A dental examination should be made within one month of admission.

**Dental Priorities.** Dental treatment is provided according to priorities established by the institutions. DOC dentists report that in the DOC dental clinics, emergency tooth problems are given top priority. Emergency medical and dental care is defined in department operating procedures as “care for an acute illness or an unexpected health need that cannot be deferred until the next scheduled sick call or clinic.” Generally, extractions and restorations are accorded the next priority. Cleanings are the lowest priority and have a waiting period that can be up to a year.

**Available Treatment.** Emergency and routine dental services are provided at DOC dental clinics. Some of the routine dental services provided include teeth cleaning, restorations (fillings), extractions, denture fitting and root canals. Oral surgery may be performed by DOC dentists, but the procedure can be complicated and time-consuming and generally oral surgery patients are sent to a private surgeon. While there is no formal written departmental policy prohibiting orthodontia and gold crowns, DOC dentists report that these services are not provided.

**Preventive Care.** Formal preventive care programs do not exist. However, several DOC dentists report that if time permits, preventive care is provided through verbal instruction during a cleaning. Toothbrushes and toothpaste are available to all inmates. However, the availability of dental floss depends on the institution.

**Staffing and Equipment**

As of September 30, 1992, DOC had 27 filled, full-time equivalent positions which provide dental services within DOC dental clinics. In addition, there were four
contract positions and two part-time (P-14) positions. The positions were filled with a
total of 35 dental staff. These staff provide services in 15 dental clinics which the
department has equipped with 32 dental operatories.

**Dental Staffing.** Dental clinics within major institutions are staffed with at
least one dentist who may be full-time, half-time or less than half-time. The 18 dentists
employed in DOC dental clinics include 12 full-time dentists, four half-time dentists
(when counting the chief dentist as a half-time dentist position), and two part-time
dentists (less than half-time). The two dental hygienists are full-time. The 15 dental
assistants include 13 full-time assistants, one half-time assistant and one part-time
assistant (Table 4).

Some dental clinics have higher ratios of inmates per dentist than others (Table
5). While Office of Health Services staff have indicated that DOC dental clinics should

---
**Table 4**

**Staffing in Major Institution Dental Clinics**

<table>
<thead>
<tr>
<th></th>
<th>Number of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dentists</td>
</tr>
<tr>
<td>Augusta</td>
<td>1</td>
</tr>
<tr>
<td>Bland</td>
<td>1</td>
</tr>
<tr>
<td>Brunswick</td>
<td>a</td>
</tr>
<tr>
<td>Buckingham</td>
<td>1</td>
</tr>
<tr>
<td>Deep Meadow</td>
<td>1</td>
</tr>
<tr>
<td>Greensville</td>
<td>2</td>
</tr>
<tr>
<td>Keen Mountain</td>
<td>1</td>
</tr>
<tr>
<td>Marion</td>
<td>a</td>
</tr>
<tr>
<td>Mecklenburg</td>
<td>b</td>
</tr>
<tr>
<td>Nottoway</td>
<td>1</td>
</tr>
<tr>
<td>Powhatan</td>
<td>1.5</td>
</tr>
<tr>
<td>Southampton</td>
<td>1</td>
</tr>
<tr>
<td>Staunton</td>
<td>1</td>
</tr>
<tr>
<td>St. Brides</td>
<td>0.5</td>
</tr>
<tr>
<td>VCCW</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>12 full-time</td>
</tr>
<tr>
<td></td>
<td>4 half-time</td>
</tr>
<tr>
<td></td>
<td>2 part-time</td>
</tr>
</tbody>
</table>

Notes:  
<sup>a</sup>: One part-time (less than half-time) position  
<sup>b</sup>: Two half-time positions  
<sup>c</sup>: P-14 position working 40 hours per week part-year  
<sup>d</sup>: P-14 position working 20 hours per week  

Source: JLARC survey of Department of Corrections dental staff, summer 1992.
### Table 5

<table>
<thead>
<tr>
<th>Institution</th>
<th>Number of Dentists</th>
<th>Total Number of Inmates</th>
<th>Ratio of the Number of Inmates Per Full-Time Equivalent Dentist</th>
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</thead>
<tbody>
<tr>
<td>Marion</td>
<td>a</td>
<td>228</td>
<td>507</td>
</tr>
<tr>
<td>VCCW</td>
<td>1</td>
<td>665</td>
<td>665</td>
</tr>
<tr>
<td>Mecklenburg</td>
<td>b</td>
<td>783</td>
<td>783</td>
</tr>
<tr>
<td>Staunton</td>
<td>1</td>
<td>840</td>
<td>840</td>
</tr>
<tr>
<td>Deep Meadow</td>
<td>1</td>
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<td>917</td>
</tr>
<tr>
<td>Keen Mountain</td>
<td>1</td>
<td>937</td>
<td>937</td>
</tr>
<tr>
<td>Southampton</td>
<td>1</td>
<td>1,002</td>
<td>1,002</td>
</tr>
<tr>
<td>Nottoway</td>
<td>1</td>
<td>1,117</td>
<td>1,117</td>
</tr>
<tr>
<td>Buckingham</td>
<td>1</td>
<td>1,169</td>
<td>1,169</td>
</tr>
<tr>
<td>Augusta</td>
<td>1</td>
<td>1,196</td>
<td>1,196</td>
</tr>
<tr>
<td>Greensville</td>
<td>2</td>
<td>2,404</td>
<td>1,202</td>
</tr>
<tr>
<td>St. Brides</td>
<td>0.5</td>
<td>621</td>
<td>1,242</td>
</tr>
<tr>
<td>Bland</td>
<td>1</td>
<td>1,296</td>
<td>1,296</td>
</tr>
<tr>
<td>Powhatan</td>
<td>1.5</td>
<td>2,410</td>
<td>1,606</td>
</tr>
<tr>
<td>Brunswick</td>
<td>c</td>
<td>756</td>
<td>5,706</td>
</tr>
</tbody>
</table>

*The number of inmates for each dental clinic is derived from combining the inmate population in the major institution with the inmate population in field units that the major institution reported it serves. When more than one major institution reported serving a field unit, the number of inmates in the field unit is divided equally among the major institutions. Therefore, the number of inmates for each dental clinic does not represent the number of inmates actually treated by the dentists.

a: Marion's dentist works a reported 18 hours/week; therefore, he is counted as 18/40 or 45 percent of an FTE.
b: Mecklenburg's dental clinic has two half-time dentists.
c: Brunswick's dentist works a reported 5.3 hours/week; therefore, he is counted as 5.3/40 or 13.25 percent of an FTE.


Be staffed at a ratio of one full-time equivalent dentist for every 600 inmates, Marion Correctional Center is the only facility that meets the standard. (Inmate per dentist ratios were calculated using the number of inmates housed in the institutions and field units that the institution reported it serves. Since some dental clinics have less than one full-time dentist, inmate per dentist ratios may be larger than the number of inmates housed in the institution and field units.)

The present dental staff is generally made up of DOC employees, but they may also be contract personnel. Currently, two part-time dentists, one full-time assistant, and one part-time assistant work under contract with the department.

Position descriptions delineate staff qualifications. For example, dentists must have graduated from an accredited dental school and be licensed by the Virginia Board
of Dentistry; dental hygienists must possess a certificate from an approved school of
dental hygiene and be licensed as a dental hygienist in Virginia; and dental assistants
must have experience working in a general dental clinic.

**Dental Equipment.** All major institutions reported that they have a dental
clinic except for James River Correctional Center. Botetourt is the only field unit that
has a dental clinic, but the clinic is not currently staffed and is not operational. While
most dental clinics operate approximately 40 hours per week, clinic hours in the facilities
range from five to 50 hours per week.

The dental clinics generally have the basic equipment required to provide dental
services. All DOC dental clinics have at least one dental operatory (Table 6). As noted
previously, a dental operatory is generally a dental chair and supporting equipment such
as a light, dental unit, cabinet and sink. Eleven of the 15 dental clinics have two or more
operatories. Greensville Correctional Center has five operatories, making it the largest
DOC dental clinic. The ratio of the number of inmates per dental operatory ranges from
228 at Marion Correctional Center to 1,296 at Bland Correctional Center (Figure 4).

<table>
<thead>
<tr>
<th>Table 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dental Equipment and Hours of Operation for</strong></td>
</tr>
<tr>
<td><strong>Each Major Institution</strong></td>
</tr>
<tr>
<td><strong>Institution</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Augusta</td>
</tr>
<tr>
<td>Bland</td>
</tr>
<tr>
<td>Brunswick</td>
</tr>
<tr>
<td>Buckingham</td>
</tr>
<tr>
<td>Deep Meadow</td>
</tr>
<tr>
<td>Greensville</td>
</tr>
<tr>
<td>Keen Mountain</td>
</tr>
<tr>
<td>Marion</td>
</tr>
<tr>
<td>Mecklenburg</td>
</tr>
<tr>
<td>Nottoway</td>
</tr>
<tr>
<td>Powhatan</td>
</tr>
<tr>
<td>Southampton</td>
</tr>
<tr>
<td>Staunton</td>
</tr>
<tr>
<td>St. Brides</td>
</tr>
<tr>
<td>VCCW</td>
</tr>
</tbody>
</table>

* Hours per week clinic is open includes lunch hours.

Source: JLARC survey of Department of Corrections dental staff, summer 1992.
Figure 4

Number of Inmates Per Dental Operatory in DOC Dental Clinics*

*The number of inmates for each dental clinic is derived from combining the inmate population in the major institution with the inmate population in field units that the major institution reported it serves. When more than one major institution reported serving a field unit, the number of inmates in the field unit is divided equally among the major institutions. Therefore, the number of inmates for each dental clinic does not represent the number of inmates actually treated by the dentists.

III. Dental Care Services

The Virginia Department of Corrections (DOC) administers dental care as part of medical care. The provisions of Estelle v. Gamble are seen as being applicable to dental care in that correctional departments should provide services necessary to relieve pain and to restore proper functioning. However, it is widely recognized that correctional systems are not required to provide complete state-of-the-art dentistry or provide the full range of dental services available to the non-incarcerated public.

The JLARC review found that the department appears to be providing treatment which is in keeping with the standards set by Estelle. Treatments offered do not seem to be excessive. However, there are three areas which the department needs to address to better provide quality care while controlling for the costs of that care within a decentralized system.

First, the central office staff in the Office of Health Services (OHS) should increase its oversight and monitoring of dental services. Currently, review and control by the central office are primarily limited to informal contact. Since the majority of the treatment decisions are made at the local level, stronger central office oversight is necessary.

Second, the department should increase its internal monitoring of the costs of all types of health care. Currently, the costs for dental care cannot be separated from the costs of mental health treatment and medical care. A necessary first step in controlling cost is having sufficient data to be able to determine what services are being purchased and the costs of those services. The information currently maintained by the department does not permit that type of analysis.

Third, it appears that the department may need additional dental staffing and equipment. However, the department could better manage its current staffing to help ensure equal and timely access to dental care for inmates throughout the system.

CENTRAL OFFICE OVERSIGHT AND MONITORING OF DENTAL CARE

DOC's central office staff exert limited control over the cost and provision of dental care at the institutional level. The department's Office of Health Services, which is composed of the health services administrator, the chief physician, the chief dentist, the chief pharmacist, and the registered nurse manager B, perform advisory rather than supervisory roles. JLARC staff found that the level of oversight provided by Office of Health Services staff has been ineffective in monitoring and controlling costs and in monitoring service delivery.
Each institution receives funding for medical care (including dental services) and is responsible for monitoring the associated expenditures. Institutions generally identify their own medical funding needs except for inpatient hospital care, which is paid from funds appropriated to the central office. In terms of service delivery, central office staff (the chief dentist in particular) are involved in the development of departmental policies and operating procedures for dental care. There is limited quality assurance monitoring of the dental care programs, however. While this level of oversight is considered by the department to be in keeping with the advisory role of central office staff, it has contributed to the department's inability to control dental care costs and service delivery.

**Departmental Policies and Procedures for Dental Care Need Revision**

Department of Corrections management staff stated that they believe the department is obligated to provide high quality health care to inmates. One of the ways the department tries to ensure that high quality care is being provided in the institutions is by drafting and disseminating department operating procedures (DOPs). Further, the department requires institutions and field units to have written institution operating procedures (IOPs) for dental care. The combination of these operating procedures should direct how dental staff are to meet the routine and emergency dental needs of the inmates.

The department has a written department operating procedure which addresses many important aspects of dental care. The dental DOP clearly states the purpose of inmate dental care and addresses many of the areas which affect the dental care provided for inmates (Exhibit 1). However, the department needs to revise the procedure to ensure that it provides adequate direction for dental care, since some important areas are not addressed.

JLARC staff have identified four areas which need to be covered in the DOP for it to provide comprehensive direction for dental care given the increasing numbers of inmates and the health problems these inmates are bringing into the system. Areas which need to be addressed by the department include policy statements on: defining the dental services which will be provided and who will provide the services to inmates with special health needs (such as HIV infected inmates); a formal system for where within the system field unit inmates are to be provided dental services; the content of dental treatment records; and the requirements for recording inmate consent to treatment or refusal of treatment for dental services.

It appears reasonable to assume that some of the areas on which the DOP is silent can be adequately covered in other department and institution documents. For example, dental staff qualifications are adequately covered in the position descriptions for dental staff and therefore do not need to be included in the DOP. Some areas, such as sick call procedures and the establishing of treatment priorities, vary among the institutions. Therefore, these types of issues appear better suited to IOPs.
Requirements for Dental Services Established by Department Operating Policy

Purpose: "To meet the routine and emergency needs of inmate patients... dental care should be provided inmates as the needs arise or when the health of the inmate would be adversely affected as determined by the responsible dentist."

<table>
<thead>
<tr>
<th>Addressed In Departmental Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

- Provided treatment defined
- Treatment of HIV patients addressed
- Uniform charting system required
- Responsibility for administration assigned
- Qualifications for dentists stated
- Staff dental qualifications defined
- Priorities for treatment required
- Priorities for treatment defined
- Time limits for conducting certain treatments stated
- System for provision of dental services to field units mandated
- Dental sick call procedures defined
- Dental treatment records required
- Signed consent to treatment/refusal forms required

Source: JLARC analysis of Department of Corrections Operating Procedure Number 716.

According to department management all institutions, regardless of whether or not there is an on-site dental clinic, should have IOPs for dental care. However, only seven of the 16 major institutions and three of the field units provided written IOPs for dental care when asked to do so (Table 7). Further, the areas covered by the IOPs vary among the ten institutions that reported having them.

The department should direct institutions and field units without IOPs to prepare written operating procedures for dental care. At a minimum, these procedures could be a statement of how dental services will be provided within that institution or field unit or that the DOP will be adopted. Further, the department should revise its current DOP to include the previously noted areas on which it is silent.
### Table 7

**Department of Corrections’ Requirements for Dental Services Established through Department and Institution Operating Policies**

<table>
<thead>
<tr>
<th>Facilities With Institution Policies</th>
<th>Areas Covered in Institution Policies</th>
<th>No Additional Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sick Call Procedures</td>
<td>Content of Records</td>
</tr>
<tr>
<td><strong>Major Institutions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>James River</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powhatan*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southampton R&amp;C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Brides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staunton</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Field Units</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baskerville</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chatham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rustburg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Policy is stated as applying to Powhatan as well as the other adult institutions that use this facility. These other institutions are not named in the policy. Based on survey responses, the institutions are Caroline, Chesterfield Work Release, Fairfax, Haynesville, James River, Pocahontas, Powhatan Reception and Classification Center, and White Post.


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**Recommendation (1).** The Department of Corrections should revise Department Operating Procedure 716 to include areas which need to be addressed to ensure that access to quality dental care is being provided to inmates. Specific areas which the department should consider including in the revised department operating procedure include, but are not limited to, defining the dental services that will be provided and who will provide the services to inmates with special health problems; establishing a written plan for where within the system field units are to be provided dental services; delineating the content of dental treatment records; and establishing requirements for recording inmate consent to treatment or refusal of treatment for dental services.
Recommendation (2). The Department of Corrections should ensure that all institutions and field units develop and disseminate institution operating procedures for dental services.

Dental Care Costs Are Not Adequately Monitored or Controlled

Dental care costs include the direct and indirect costs of providing care within correctional institutions and in the community by private dentists and oral surgeons. The direct costs for providing care within institutions include dental chairs, equipment, materials, supplies, pharmaceuticals, and personnel-related costs. The direct costs for dental care provided within the community include all charges billed by the dentist for inmate care. The indirect costs, which involve any expenses associated with transporting and guarding inmates to enable them to receive dental care, apply in different magnitudes to care provided within an institution and by a private dentist.

One of the most effective means of controlling direct and indirect dental costs within a correctional system is to provide that care within the institution rather than at a private dentist's office. Typically, care by a private dentist will be more costly than care provided within an institution, particularly when both direct and indirect costs are considered. DOC has requested additional dental care positions in the past in an attempt to minimize the need to use private dentists for the care. However, DOC has not been effective in presenting the cost implications of not funding additional dental positions. This is primarily due to the fact that dental cost data are not centrally monitored or maintained by the department.

Dental-Specific Cost Data Need to Be Maintained by Central Office. The focus of the financial division of DOC is to ensure that expenditures are appropriately reported within the correct program area and that the expenditures do not exceed the allotted amounts available within the program area. This level of analysis is consistent with the expectations of the Department of Planning and Budget (DPB) for a financial division. However, this level of analysis does not allow for identifying the primary determinants of cost increases, a first step in controlling dental care costs.

Although dental care is budgeted as part of the overall medical care program, DOC could institute “cost centers” that would allow for separate reporting of dental expenditures. Cost centers allow agencies to internally track expenditures in a manner that is more useful for that agency. Currently DOC does not have a cost reporting system that effectively isolates the cost of providing dental care from mental health or medical care.

In addition, DOC should determine the categories of dental expenditures that it would like to be able to isolate and ensure that corresponding sub-object expenditure codes are exclusively dedicated to those expenditures. One category of expenditure which would be particularly important to monitor is the cost of care provided by private dentists and oral surgeons. DOC will first need to standardize the reporting of expenditures at the sub-object level, however. The results of a questionnaire, administered by JLARC
staff, found widespread diversity in which sub-object expenditure codes are currently used for a variety of dental care services (Table 8). DOC finance staff indicated that although the goal was to have consistent reporting of expenditures even to the sub-object level, they expected some inconsistency considering the number of institutional and regional staff affected. It is important to ensure general consistency since extensive diversity in the reporting of expenditures lessens the meaningfulness of cost data and limits its usefulness in controlling costs.

**Recommendation (3).** The Department of Corrections should promulgate detailed instructions regarding the coding of dental, mental health, and medical expenditures at the sub-object level. These instructions should be explained and distributed to all staff involved in coding expenditure data.

**Recommendation (4).** The Department of Corrections should establish cost centers which differentiate dental care expenditures from mental health and medical expenditures. Detailed instructions regarding the coding of these cost centers should be promulgated, explained, and distributed to all staff involved in coding expenditure data.

**Dental-Specific Cost Data Need to be Monitored by Central Office.** Since comprehensive statewide data are not maintained, no one in the central office can effectively monitor dental costs. The only expenditures that are closely monitored by the Office of Health Services staff involve the funds appropriated to central office for inpatient care. Correctional institutions are not required to report the cost of dental care or oral surgery to central office.

Central oversight of comprehensive, meaningful cost data is needed if dental care costs are to be controlled. It appears that the need for central office review of medical cost data has been recognized by the department. A request for proposals (RFP) for a

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**Table 8**

Use of Expenditure Codes for Various Health Care Expenses

<table>
<thead>
<tr>
<th>Services</th>
<th>Expenditure Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1231</td>
</tr>
<tr>
<td>Dentures</td>
<td>0</td>
</tr>
<tr>
<td>Private Dentist</td>
<td>0</td>
</tr>
<tr>
<td>Oral Surgery (dental reason)</td>
<td>0</td>
</tr>
<tr>
<td>Oral Surgery (medical reason)</td>
<td>0</td>
</tr>
<tr>
<td>Emergency Room Care</td>
<td>12</td>
</tr>
</tbody>
</table>

consultant “to evaluate and make recommendations regarding inmate health care systems within the Department” was issued in June 1992. DOC awarded the contract for $45,000 to CGA Consulting Services, Incorporated on November 4, 1992. The contract requires a final report document within 90 days of the award date. One of the purposes of the RFP is to determine and review what medical care has been provided to inmates, including what the associated costs have been (Exhibit 2).

Monitoring dental care cost data will allow the department to complete cost comparisons of a variety of dental care alternatives. This will assist DOC in taking cost containment actions and in making budgetary decisions. If there are any additional staffing and funding needs, over time, centralized dental cost data should provide substantiation of these needs.

Recommendation (5). The Department of Corrections should ensure that dental care cost data are reviewed by someone in central office at least quarterly. The cost data should be used in evaluating alternative means of providing dental care and in recommending cost containment actions.

Dental Care Services Are Not Adequately Monitored and Coordinated

A second important means of controlling dental costs is to monitor service delivery both in terms of the types of services being provided and where and how those services are provided. JLARC staff found that the Office of Health Services lacks valid information concerning the number and types of dental services provided both within major institutions and by private dentists. Central office staff also have a limited role in coordinating dental care service delivery to ensure that the least costly alternative is used. Although the inability of the chief dentist to devote his time to statewide administrative duties may have contributed to these problems, it appears that central office staff are not expected to take a strong leadership role.

Morbidity Reports Cannot be Used to Monitor Dental Services. Dental care services provided within correctional institutions are reported on a monthly basis on what DOC staff refer to as “morbidity reports.” The 1987 JLARC report, Staffing of Virginia's Prisons and Field Units, found problems with the data contained in morbidity reports. The report noted that there was no standard definition of what constituted a patient visit and that the reports were inconsistently submitted. The JLARC report recommended that DOC establish procedures to improve its medical information reporting system by standardizing the methods by which data are recorded in the reports. This review of current morbidity reports indicates that DOC has not complied with the previous JLARC recommendation. Thus, the morbidity reports continue to have problems that preclude their use as valid indicators of the services delivered.
Request for Proposals for Inmate Health Care Consulting Services Issued June 9, 1992

STATEMENT OF NEEDS: The results of this evaluation shall serve as the basis from which specific recommendations are to be made which will improve the Department's planning process for health care services as well as cost containment measures and service delivery systems. Contract related services to be provided shall include the following:

Propose alternate strategies and systems (manual and automated) to improve information for management and evaluation of the Virginia DOC health care system.

Examine Virginia DOC inmate standards of care with regard to applicable state and federal laws, court decisions, regulations and prevailing professional practices.

Survey and describe the current levels of health care provided to all categories of DOC inmates.

Survey, categorize and describe the costs of inmate health care services provided by the Virginia DOC.

Evaluate the feasibility of cost savings strategies for health care services.

Survey, categorize, and describe current costs of custodial and medical care for physically disabled, aged and terminally ill inmates in the State correctional system.

Evaluate the feasibility of providing alternative release, custodial and housing programs for such inmates which maximize federal Medicaid, Medicare and Social Security funding.

Examine costs associated with inpatient and outpatient inmate hospitalization, and recommend cost-saving alternatives, to include the feasibility of contracting with hospitals other than the Medical College of Virginia Hospitals....

Examine costs associated with existing contracts between the DOC and private physicians, and other medical service providers, and recommend cost-saving alternatives.

Source: Excerpts from the Department of Corrections' Request for Proposals dated June 9, 1992.
A questionnaire administered to 14 dentists working in major institutions revealed the following inconsistencies continue to characterize the submission of morbidity reports:

- while 13 dentists filled the report out each month, one dentist filled the report out occasionally;
- all of the responding dentists reported on the dental services provided within their own institutions, but two dentists also reported the care provided outside their institutions by private dentists;
- in reporting five visits for one extraction (a hypothetical situation), three dentists would have reported one extraction, two dentists would have reported five extractions, and eight dentists would have reported one extraction and four visits as "other" services; and
- wide variation was shown in the services the dentists reported under the "other" category, ranging from zero to 12 different services being included.

A review of completed morbidity reports showed that seven different forms, with as few as three and as many as nine categories of dental services, were submitted by the 16 major institutions. During one month, the number of services reported within the "other" category on these reports ranged from zero at one institution to more than 300 at another institution.

The lack of standardization and effective review of the data reported on the morbidity reports has resulted in service data being collected that does not accurately represent the services provided. When questioned about the usefulness of the morbidity reports, the chief dentist stated that he does not review the reports, as he does not consider the information to be specific enough to be useful. The health services administrator reviews the reports but does not summarize the data or enter the data into an automated database, thereby limiting their usefulness.

Despite the limitations in the accuracy and usefulness of the morbidity reports, correctional institutions are expected to submit the reports on a monthly basis. Institutional staff are spending a considerable amount of time filling out reports that are limited in their usefulness. Dental care staff within the major institutions reported spending 34 hours collectively filling out the dental section each month. In addition, nurses within field units reported spending 58 hours collectively each month filling out the entire report.

DOC needs to establish a better mechanism for the institutions to report on services provided. A computerized database into which each institution could enter data directly would be the best means of providing meaningful service data to central office. A computerized database would also be most useful for the institutions themselves in terms of monitoring inmate care. Office of Health Services staff indicated they have proposed the development of a computerized health care database. They did not believe
that such a database would be quickly implemented however, because of other automa-
tion priorities within the department. If a computerized database is not going to be
established in the near future, DOC should redesign the morbidity reports to ensure the
standardization and usefulness of the data reported. This morbidity report data should
be entered onto a spreadsheet by central office staff to facilitate analysis.

Recommendation (6). The Department of Corrections should develop
a standardized morbidity report form with meaningful service categories.
Specific definitions of what services are to be reported and how they are to be
reported, including what constitutes a patient visit, should be determined.

Recommendation (7). The Department of Corrections should consider
establishing a computerized database for reporting medical service data. A
database into which each institution could directly enter data would be most
useful and convenient for both the institutions and central office and would
facilitate central office analysis of the data.

Central Office Staff Have a Limited Role in Dental Service Delivery. As
noted previously, central office staff are involved in establishing general policies related
to the dental care that is to be provided for inmates. Questions regarding specific problem
situations are often referred to the chief dentist. However, there are a number of areas
in which the Office of Health Services appears to have a limited role regarding dental care
service delivery.

First, central office staff have a limited role in arranging for field unit inmates
to receive dental care at major institutions. As noted previously, the department has no
written policy or procedure which covers the provision of dental care to field unit inmates.
Often, the regional administrator has more influence in determining where inmates will
be treated. In at least one instance, dental staff reported that non-medical institutional
personnel attempted to dictate the workload of dental care personnel to ensure that field
unit inmates were treated in a timely manner. This type of influence violates DOC's
operating procedures. Department Operating Procedure 702 states:

Medical and dental personnel should have no restrictions imposed
upon them by the facility administration regarding the practice of
medicine, dentistry or nursing.... The medical authority arranges for
the availability and delivery of medical services.

Second, requests to refer an inmate to a medical specialist are reviewed and
approved by the chief physician or chief dentist including requests involving oral surgery.
However, no similar approval is required for inmates to see a private dentist if the dental
services to be provided are not related to special needs (i.e., dental treatment for
hemophiliacs, cardiac patients, oral surgery, etc.). Generally, field unit respondents to
a JLARC survey indicated that authorization to use a private dentist was given by the
regional administrator or the field unit superintendent. Survey respondents also
reported that, on average, each field unit sends 494 inmates to private dentists each year;
each major institution sends 42 inmates.
Third, neither central office nor the Medical Society of Virginia Review Organization (MSVRO) monitors the number of referrals made to private dentists' offices. DOC's Office of Health Services does not require correctional institutions that use private dentists to report on those services. MSVRO receives no notification of the dental care referrals and they are not monitored as the number of oral surgery referrals are.

Fourth, annual operational reviews frequently fail to mention the dental care services that are provided. A sample of 16 reviews of major institutions, completed during the years of 1990 through 1992, were reviewed by JLARC staff. Only nine of the reviews mentioned the dental care program, and these reviews involved limited analysis of any identified dental care problems (Exhibit 3). This absence of detailed dental service information may be indicative of the fact that staff trained in dental care are not involved in completing the audits. It also appears that the findings of the audits are not systematically shared with the institutional dentists. Only five of the 15 dentists could identify when the last operational review of their clinic had been completed. One dentist stated that he has never seen a written report detailing dental review findings.

**Recommendation (8).** The Department of Corrections should direct the Office of Health Services to take a more active role in directing and overseeing dental care provision. Some of the areas in which this could be beneficial include:

- coordinating dental care service delivery to ensure that the use of private dentists is minimized and dental care staffing and equipment is productively used;

- approving the use of private dentists only when more cost-effective alternatives are not available;

- monitoring the use of private dentists including the reasons for their use, the dental procedures that were completed, and the associated costs; and

- reviewing dental services as a part of the annual operational review of medical services. (This should involve using dental staff in completing the reviews, interviewing dental staff as part of the reviews, and sending a written report to the institution’s dentist.)

**Chief Dentist Has Not Devoted Time to Administrative Duties as Planned.**

The chief dentist position was established in 1989. The expectation was that the chief dentist would devote approximately 50 percent of his time to statewide administration of dental services. The other 50 percent of his time would be spent providing dental care to inmates at Powhatan Correctional Center.

According to the position description for the chief dentist, the following administrative tasks are to be performed:
### Exhibit 3

**Dental Care Findings Noted in OHS Operational Reviews**

**January 1990 - August 1992**

<table>
<thead>
<tr>
<th>Location</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Institution with a Dental Clinic</td>
<td>Dental equipment was sufficient but most of it needs maintenance and/or replacement. “I don’t know how [the dentist] does all he does with the out-dated and run-down equipment. I fear that if one more thing breaks down the whole dental program will come to a halt....”</td>
</tr>
<tr>
<td>Major Institution with a Dental Clinic</td>
<td>“The dental staff is not adequate to manage the number of inmates at [this institution and the two field units seen] except for very necessary procedures. The unit is doing a good job with what it has.”</td>
</tr>
<tr>
<td>Major Institution with a Dental Clinic</td>
<td>Dental services are appropriate.</td>
</tr>
<tr>
<td>Major Institution with a Dental Clinic</td>
<td>The dentist has requested appropriate gloves for use in the dental area. These gloves are not on State Contract. A message has been sent to the dentist addressing this issue.</td>
</tr>
<tr>
<td>Major Institution with a Dental Clinic</td>
<td>There was no significant backlog in dental unit until the dental assistant left.</td>
</tr>
<tr>
<td>Major Institution without a Dental Clinic</td>
<td>The institution lacks sufficient dental services, dentist documentation should be reviewed.</td>
</tr>
<tr>
<td>Field Unit</td>
<td>There is a long dental list for cleanings (200) and fillings (154). They should consult with [the chief dentist] at Powhatan Correctional Center about dental services.</td>
</tr>
<tr>
<td>Field Unit</td>
<td>Dental services are good but some backlog is present.</td>
</tr>
<tr>
<td>Field Unit</td>
<td>Additional dental services are needed. A plan to provide dental services is needed, should consult with chief dentist, if necessary, for assistance and recommendations.</td>
</tr>
</tbody>
</table>

Source: Excerpts from the Department of Corrections' operational reviews completed between January 1990 and August 1992.
• coordinating and completing quality assurance reviews,

• acting as a resource regarding the proficiency of dentists and the operation of dental clinics,

• investigating complaints and inmate grievances,

• authorizing inmate requests to receive services from private sources,

• developing standards and procedures for dental services,

• providing training programs for dental staff,

• acting as the department's contact with the Board of Dentistry and other State agencies,

• planning for the needs of dental clinics within new institutions,

• participating in the selection of dental care staff, and

• developing the budget for dental care staffing and clinic needs.

The chief dentist indicated that he has not devoted 50 percent of his time to these administrative duties. Some of the duties noted in the job description have not been undertaken, such as the completion of quality assurance reviews, while other duties have been inconsistently performed. The chief dentist cited pressing dental care needs and staffing vacancies at Powhatan as reasons he was not able to devote more time to administration.

The inability of the chief dentist to devote 50 percent of his time to statewide administration of the dental program seems to have contributed to deficiencies in the monitoring of dental services and his ability to be a resource for dentists in the institutions. At a meeting held in June 1992, a number of dentists voiced the need for better representation in central office and better communication regarding dental care issues. Several dentists stated that a full-time dentist is needed in central office to assist in problem-solving.

DOC management recognized the need for an additional half-time dentist position to provide needed dental services at Powhatan and to allow the chief dentist to attend to statewide administrative duties. DOC requested such a position during both the 1990-92 and the 1992-94 biennia but these requests were not approved.

Recommendation (9). To assist in addressing the oversight and monitoring needs of the dental program, the chief dentist should devote 50 percent of his time, as needed, on the statewide administrative duties specified in the position description. The Department of Corrections should explore alternative ways to continue to provide the current level of dental services at Powhatan.
COST OF DENTAL CARE

The entire cost of the dental care services provided by the Department of Corrections cannot be readily determined. This is due to the fact that for budgeting and expenditure-reporting purposes, dental care is treated as a component of medical services rather than as a separate type of care. Two types of dental care expenditures that can be reasonably estimated are staffing costs and the direct costs related to care provided by private dentists outside correctional institutions. A review of these dental care expenditures from FY 1990 to FY 1992 revealed that internal staffing costs have actually decreased on a per-inmate basis while the direct cost of using private dental care has more than doubled on a per-inmate basis from $12 to $27 (Table 9). Similarly the total cost of dental staffing and private dental care has increased from $79 per inmate to $89 per inmate for the three-year period.

A decreasing ratio of dentists to inmates has meant that a larger number of inmates have had to receive dental care from private dentists. This has increased the costs associated with their dental care. In supporting the need for additional health care staff, DOC's budget addendum for the 1992-1994 biennium noted the "huge demand [for

Table 9

Estimated Expenditures for a Portion of Inmate Dental Care, Fiscal Years 1990 - 1992

<table>
<thead>
<tr>
<th></th>
<th>FY 1990</th>
<th>FY 1991</th>
<th>FY 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Expenditures for Dental Staffing</td>
<td>$975,286</td>
<td>$1,092,296</td>
<td>$1,031,637</td>
</tr>
<tr>
<td>Estimated Expenditures for Private Dental Care</td>
<td>$174,985</td>
<td>$313,894</td>
<td>$454,783</td>
</tr>
<tr>
<td>Inmate Population</td>
<td>14,589</td>
<td>14,683</td>
<td>16,672</td>
</tr>
<tr>
<td>Dental Staffing Expenditures Per Inmate</td>
<td>$67</td>
<td>$74</td>
<td>$62</td>
</tr>
<tr>
<td>Private Dental Care Expenditures Per Inmate</td>
<td>$12</td>
<td>$21</td>
<td>$27</td>
</tr>
<tr>
<td>Total Dental Staffing and Private Dental Care Expenditures Per Inmate</td>
<td>$79</td>
<td>$95</td>
<td>$89</td>
</tr>
</tbody>
</table>

inmate health care] has forced the Department to procure temporary contractual medical and dental services in local communities which have proven to be less cost effective; less effective in the provision of continuity of care; and in some instances placing the community's safety at risk."

In reviewing possible reasons for the escalating external dental care costs, JLARC staff found three primary factors including:

- the number of dentists employed has not increased in proportion to increases in the inmate population,

- the types of dental care staff working within institutions do not maximize efficiency, and

- facility limitations and equipment needs restrict the productivity of dental care staff.

Staffing, physical plant, and equipment deficiencies resulted in increased costs related to DOC-provided dental care and greater reliance on costly private care in the community. JLARC staff also found unique problems related to the provision of contract dental care within Greensville Correctional Center.

Dental Care Staffing May Not Be Adequate

The number of dentists employed by the Department of Corrections has not kept up with increases in the inmate population. In FY 1988, 12 full-time dentist positions were established by DOC to provide care for an inmate population of 11,522. This resulted in a dentist to inmate ratio of 1 to 960. By FY 1992, that ratio had increased to one dentist for every 1,076 inmates (when the chief dentist is included as a half-time position in terms of providing dental treatment). DOC's internal staffing guideline, which is one dentist for every 600 inmates, would suggest that 28 full-time dentist positions would have been the optimal number for providing care for the inmate population of 16,672. As shown in Table 10, 15.5 dentist positions were established but only 13 of these positions were filled (when the chief dentist is counted as a half-time position). While optimal staffing may not be possible given the type of budgetary constraints the State is currently experiencing, dentist staffing levels do appear to be inadequate.

Exacerbating these deficiencies in staffing of dentist positions has been the department's inability to fill some vacant dental care positions. One full-time dentist position at Mecklenburg was vacant for five months while one half-time position at Brunswick and one full-time position at Powhatan are currently vacant. Two dental hygienist positions, at the Greensville and Augusta correctional centers, were never filled because qualified applicants could not be attracted. Problems with hiring full-time staff and having an adequate number of dental positions has meant that contract dentists have been hired to work within institutions and that the use of private dentists has increased. Neither alternative appears to be cost effective.
Table 10

Number of FTE* Dentist Positions
Fiscal Years 1988 - 1992

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established Positions</td>
<td>12</td>
<td>13</td>
<td>14.5</td>
<td>15.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Filled Positions</td>
<td>11</td>
<td>12</td>
<td>14.5</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Inmate Population</td>
<td>11,522</td>
<td>12,226</td>
<td>14,589</td>
<td>14,683</td>
<td>16,672</td>
</tr>
<tr>
<td>Inmates Per Established Position</td>
<td>960</td>
<td>940</td>
<td>1,006</td>
<td>947</td>
<td>1,076</td>
</tr>
<tr>
<td>Inmates Per Filled Position</td>
<td>1,047</td>
<td>1,019</td>
<td>1,006</td>
<td>979</td>
<td>1,282</td>
</tr>
</tbody>
</table>

* Full-time equivalent


The Department of Corrections requested additional dental staffing for both the 1990-92 and the 1992-94 biennia. Three and one-half dentist and nine dental assistant positions were requested for the 1990-92 biennium but none of the requested positions was approved. During the first year of the 1992-94 biennium, DOC requested six dentist, two dental hygienist, and 11 dental assistant positions. None of these requested positions was approved. Department of Planning and Budget staff indicated that the requests were not approved because of budget constraints and DOC’s inability to provide anything other than anecdotal cost data concerning the consequences of not receiving the staffing.

Recommendation (10). The Department of Corrections should systematically collect and maintain service and cost data to be used in evaluating and supporting the need for additional dental staff. These data should include the number of inmates seen by private dentists, the services rendered, and the associated costs. Similar data should be collected and maintained regarding the services provided inmates within correctional institutions.

Staffing Complements Do Not Maximize Efficiency

A second constraint to efficiency relates to the types of dental care staff who are employed. It appears that an insufficient number of dental hygienists, dental assistants, and oral surgeons are employed. The failure to employ dental assistants and dental
hygienists has resulted in dentists (grade 16) performing duties that a hygienist (grade 9) or a dental assistant (grade 4) could perform. The failure to employ any oral surgeons has meant that the majority of oral surgeries must be referred to private surgeons.

There are a number of duties involved in providing dental care that can be more cost-effectively performed by a dental assistant than a dentist. These duties include sterilizing chairs and instruments, reviewing inmate request forms, scheduling inmates for appointments, filing inmate records, and taking x-rays. These duties will be increasing as new Occupational Safety and Health Administration (OSHA) guidelines are implemented. Similarly a dental hygienist is capable of cleaning the inmates' teeth in all but the most deteriorated cases.

Five major institutions operate dental clinics without employing full-time dental assistants. In addition, only two dental hygienists are employed system-wide. These differences in staffing complements were reflected in the dentists' estimates regarding the percentage of time spent on six categories of tasks. The dentists reported spending between zero and 35 percent of their time cleaning teeth and between zero and 40 percent of their time taking x-rays or sterilizing chairs or instruments (Table 11). The percentage of time DOC dentists reported spending on direct dental care (examinations, extractions, restorations, root canals, and interpreting x-ray results) also varied widely ranging from 30 percent to 80 percent (Table 11). Of the six institutions in which the dentists spent at least 70 percent of their time on dental services, two institutions employed a dental hygienist, one dentist had two dental assistants, and one institution had more than twice as many dental operatories as dentists.

Ten of the 15 dentists responding to the JLARC survey specifically noted their need for additional support staff in order to improve productivity. Several dentists noted:

- We need a dental assistant to help take care of the scheduling, cleaning up after patients leave and to assist both the dentist and the dental hygienist. This could help us to see more patients.

- [A] dental hygienist could allow [me] to concentrate treatment on emergencies, routing restorations, extractions, dentures, etc.

- I need a dental hygienist full-time to relieve me of delegatable treatment and reduce waiting time for cleanings and other routine treatments.

The department also relies on private oral surgeons to provide specialized care. As noted previously, inmates who require oral surgery are usually referred to surgeons outside the department. According to Medical Society of Virginia Review Organization records for the time period October 1989 through July 1992, oral surgery was the third most frequently requested referral to a private practitioner. During the 34-month period, 696 requests to refer to an oral surgeon were made and only six of these requests were denied. Expenditure figures for FY 1992, which were supplied by DOC accounting staff, showed that $203,358 was spent on private oral surgery expenses by major institutions and field units.
Table 11
Percentage of Time Spent by Dentists on Various Dental Activities

<table>
<thead>
<tr>
<th>Direct Dental Care*</th>
<th>Cleanings</th>
<th>Taking X-rays</th>
<th>Sterilization</th>
<th>Administration</th>
<th>Other</th>
</tr>
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<td>0</td>
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<td>30</td>
<td>20</td>
<td>10</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

*Direct dental care includes examinations, extractions, restorations, root canals, and interpreting x-ray results.

Note: Each horizontal line in this table shows how an individual DOC dentist allocated his time across the categories.

Source: J/LARC survey of Department of Corrections dentists, summer 1992.

Recommendation (11). The Department of Corrections should prepare a dental care staffing plan that links increased staffing with improved productivity and decreased reliance on private dentists. As part of this plan, the Department should examine the types of dental staff employed in an effort to maximize the productivity of the dentists. Dental assistant and dental hygienist positions should be used whenever possible to complete tasks such as sterilizing chairs and instruments, reviewing inmate request forms, scheduling inmates for appointments, filing inmate records, taking x-rays, and cleaning teeth.

Recommendation (12). As part of the dental staffing plan, the Department of Corrections should delineate alternative means of meeting the oral surgery needs of inmates. The plan should review the reasons that inmates typically need the services of an oral surgeon and how these needs have been met in the past. The projected costs associated with alternative ways of providing oral surgery for inmates should be delineated in the plan.
Facility Limitations and Equipment Needs Limit Productivity

Facility and equipment limitations are a third efficiency constraint. The availability of dental operatories also impacts dentists' productivity. Dental clinics with only one dental operatory sustain unavoidable “down time” while staff wait for sterilization periods to elapse or for inmates to respond to anesthesia. Dental chairs must be sterilized between each patient due to the danger of blood-borne diseases and OSHA requirements. OSHA requires a minimum of ten minutes for the sterilization. Similarly the dentist may seat an inmate in the chair, anesthetize the inmate, and have to wait for the anesthesia to work before proceeding. Four major institutions (Bland, Deep Meadow, Marion, and St. Brides) have only one dental operatory.

As noted previously, no field unit currently has a functioning dental clinic. One field unit has established a dental clinic by purchasing used dental equipment. (This will be discussed further in the following section on access to care.) The clinic is intended to serve three field units, as there are no major institutions in close proximity to this unit and the two units to be served by the clinic. Establishing dental clinics within larger field units that cannot be served by a nearby major institution may also be a cost-effective alternative to expanding existing clinics.

Recommendation (13). In conjunction with the development of the dental care staffing plan, the Department of Corrections should delineate the need to expand or establish specific dental clinics and purchase additional dental equipment to allow major institutions and field units to treat additional inmates more productively. As part of this plan, the cost-effectiveness of establishing additional dental clinics at field units should be considered.

Private Contract Services at Greensville Need Additional Examination

In 1990, the department contracted with a private vendor to provide medical, mental health, and dental services at Greensville Correctional Center. The vendor terminated the contract after 22 months and the department has recently entered into a new contract with a different vendor.

Given the importance of privatization as a potential means to provide quality medical care while controlling costs, JLARC will be examining Greensville in detail in the next phase of this study. However, JLARC analysis of dental care provision at Greensville indicates that some dental equipment may not be fully utilized and the staff mixture of State and private employees may be problematic.

The department originally signed a contract with Southside Medical Systems, Incorporated on September 15, 1990, for $3.9 million to provide medical, mental health, and dental care for the first year of operation at Greensville. After less than two years, however, the department reports that the contractor utilized the termination clause. On July 1, 1992, the department entered into a new contract with ARA Health Services, Incorporated. The contract stipulates a fixed annual cost of $5.8 million (plus an annual
inflation factor of 6.5 percent) for the provision of health care services and will expire June 30, 1997. A total of 91,675 full-time equivalent positions are at Greensville of which 75,675 positions are employed by the contractor and 16 are employed by the State.

The Greensville Dental Clinic Has Not Been Utilized as Planned. The department had planned that the Greensville dental clinic would serve all of the inmates housed in the Greensville Correctional Center and in several nearby field units. However, Greensville's dental clinic has had difficulty providing dental services to its own inmates and does not currently provide dental services for any field units.

To provide dental services to a large number of inmates, the dental clinic at Greensville was set up with five dental operatories, making it the largest dental clinic in the department. Greensville's dental clinic is also located in a spacious area and has modern laboratory and x-ray equipment.

The department has reported two main issues relating to the under-utilization of the dental clinic. These issues include dental staff reductions and difficulties getting inmates to the clinic.

On July 1, 1992, the department eliminated four contract positions in the Greensville dental clinic. These positions included one dentist, one dental hygienist, one dental assistant, and one clerk. In response to dental staff concerns about the staff reductions, a department official indicated that the reduction of one dentist and one assistant was not a permanent action and that the rationale for the temporary reductions was a lack of productivity in the dental clinic. The lack of productivity was reportedly determined from an analysis of morbidity report data submitted by Greensville and intermittent observations by Office of Health Services staff. The official also noted that the hygienist position had been vacant since November 1991.

Greensville dental staff attribute long-standing productivity deficiencies to an inability to receive inmates at the dental clinic for treatment. They report that this is generally due to the nature of the Greensville compound and security issues which have not been fully addressed. Potential causes of this problem reported by Greensville dental staff include the inability to mix inmates from different units, having to wait for inmates to be brought to the dental clinic because security is understaffed, inmate no-shows due to inmates claiming that they did not receive dental passes, and not having a security guard posted in the building to bring inmates from the holding cell to the dental clinic. Recently, however, Greensville dental staff have noted that inmate no-shows have been significantly reduced due to security staff requiring inmates to sign for their dental passes.

One indicator of problems in the dental clinic is a high rate of grievances for dental care filed by inmates. The JLARC analysis of dental grievances filed by inmates between January 1 and September 15, 1992, indicates that Greensville had the highest dental grievance rate among major institutions (Table 12). Further, while Greensville has 18 percent of the major institution population, it has 51 percent of the total number of dental grievances filed within the major institutions.
Table 12
Inmate Dental Grievances by Major Institution

<table>
<thead>
<tr>
<th>Facility</th>
<th>Number of Grievances</th>
<th>Number of Inmates in Facility</th>
<th>Grievance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greensville Total</td>
<td>825</td>
<td>2,404</td>
<td>.34</td>
</tr>
<tr>
<td>Greensville Correctional Center “A”</td>
<td>431</td>
<td>734</td>
<td>.59</td>
</tr>
<tr>
<td>Greensville Correctional Center</td>
<td>295</td>
<td>1,474</td>
<td>.20</td>
</tr>
<tr>
<td>Greensville “Segregation” Building</td>
<td>99</td>
<td>160</td>
<td>.61</td>
</tr>
<tr>
<td>Greensville Medical Building</td>
<td>0</td>
<td>36</td>
<td>.00</td>
</tr>
<tr>
<td>VCCW</td>
<td>112</td>
<td>665</td>
<td>.17</td>
</tr>
<tr>
<td>Nottoway</td>
<td>136</td>
<td>1,060</td>
<td>.13</td>
</tr>
<tr>
<td>Powhatan</td>
<td>148</td>
<td>1,237</td>
<td>.12</td>
</tr>
<tr>
<td>Staunton</td>
<td>61</td>
<td>726</td>
<td>.08</td>
</tr>
<tr>
<td>Brunswick</td>
<td>59</td>
<td>756</td>
<td>.08</td>
</tr>
<tr>
<td>Mecklenburg</td>
<td>24</td>
<td>343</td>
<td>.07</td>
</tr>
<tr>
<td>Buckingham</td>
<td>60</td>
<td>929</td>
<td>.06</td>
</tr>
<tr>
<td>James River</td>
<td>22</td>
<td>384</td>
<td>.06</td>
</tr>
<tr>
<td>Deep Meadow</td>
<td>44</td>
<td>829</td>
<td>.05</td>
</tr>
<tr>
<td>Keen Mountain</td>
<td>35</td>
<td>764</td>
<td>.05</td>
</tr>
<tr>
<td>Augusta</td>
<td>42</td>
<td>1,067</td>
<td>.04</td>
</tr>
<tr>
<td>St. Brides</td>
<td>13</td>
<td>508</td>
<td>.03</td>
</tr>
<tr>
<td>Southampton</td>
<td>20</td>
<td>800</td>
<td>.03</td>
</tr>
<tr>
<td>Bland</td>
<td>9</td>
<td>600</td>
<td>.02</td>
</tr>
<tr>
<td>Marion</td>
<td>2</td>
<td>171</td>
<td>.01</td>
</tr>
<tr>
<td>Total</td>
<td>1,612</td>
<td>13,233</td>
<td>.12</td>
</tr>
</tbody>
</table>

Source: JLARC staff analysis of Department of Corrections data on dental grievances filed by inmates between January 1 and September 15, 1992.

Mixture of State and Private Employees May Be Problematic. The Greensville dental clinic is currently staffed with a mixture of State and private employees, and as a result problems could arise, because the employees feel they have different input into decision making. The clinic has a total of two full-time dentists and two full-time dental assistants. Along with Powhatan, this is the largest number of dental staff for any dental clinic. The two dentists and one dental assistant in the dental clinic are State employees. The second dental assistant is privately employed by the contractor.

Dental staff report that the contract administration will meet with the privately employed dental assistant, but will not meet with the three State employees. As a result, the three State employees in the dental clinic feel that they are denied any role in decision making regarding the dental clinic.
Problems at Greensville Continue to Be Monitored by Central Office.

Central office staff have indicated that they are actively monitoring the problems at Greensville. They acknowledge that Greensville needs additional time to be able to operate smoothly. However, it appears that the department is beginning to address long-standing, security-related problems impacting dental care. Given the importance of privatization as an option to control medical costs, JLARC staff will focus on these and other problems identified during the second year of the study.

ACCESS TO DENTAL CARE

One of the major provisions of Estelle v. Gamble is that inmates be provided access to medical care. While the decision does not mention dental care specifically, this provision is seen as applying to dental care.

Access to dental care may be limited for some inmates due to a need for additional staff and equipment. Limited resources may be a major reason for unequal access. However, the department, through its central office staff and the chief dentist, could better manage its resources to ensure inmates throughout the system equal access to care.

Specifically, the department needs to promulgate guidelines which specify where within the system inmates are to receive care. Regardless of staffing needs, these guidelines are a necessary first step to help ensure timely and equal access to dental care.

Treatment Guidelines for Field Unit Inmates Are Not Formalized

The 21 field units and one major institution rely either on major institutions or private dentists to provide dental care to their inmates. However, the department has not developed any written guidelines which direct where within the system services are to be provided and which treatment needs are to be taken to private dentists. In fact, Office of Health Services staff stated that there are no formal written guidelines directing which major institutions are to provide dental services for field units and the frequency of these services.

Many field units have negotiated agreements with major institutions to provide dental treatment (Figure 5). Some of these agreements designate the number of field unit inmates that the major institutions will treat; others are simply informal agreements for service provision. However, these agreements do not guarantee timely access to dental care for field unit inmates. Further, two field units do not have agreements with major institutions for dental services and must therefore rely completely on private dentists for care.

Agreements Do Not Ensure Timely Access to Dental Care for Field Unit Inmates. Due to staffing limitations, DOC dentists give treatment priority to inmates from their own institution. Therefore, availability of dental care from DOC dental clinics
Figure 5

Field Units Served by Major Institution Dental Clinics*

- Major Institutions:
1. Augusta
2. Bland
3. Brunswick
4. Buckingham
5. Deep Meadow
6. Greensville
7. James River
8. Keen Mountain
9. Marion
10. Mecklenburg
11. Nottoway
12. Powhatan
13. Southampton
14. Staunton
15. St. Brides
16. Virginia Correctional Center for Women

- Field Units:
  a. Appalachian
  b. Baskerville
  c. Botetourt
  d. Caroline
  e. Chatham
  f. Chesterfield
  g. Cold Springs
  h. Dinwiddie
  i. Fairfax
  j. Halifax
  k. Harrisonburg
  l. Haynesville
  m. Patrick Henry
  n. Pocahontas
  o. Pulaski
  p. Rustburg
  q. Stafford
  r. Tazewell
  s. Tidewater
  t. White Post
  u. Wise

*As reported by major institution dental care staff.

Source: JLARC survey of Department of Corrections' dental staff, summer, 1992.
for field units is often limited due to the major institution limiting the number of field unit inmates it will treat. For example:

A field unit nurse indicated that the field unit needed to send eight inmates every two weeks to the major institution for dental care. However, the major institution dentist agreed to treat only five inmates from the field unit every two weeks. The dentist reportedly refused to treat three additional field unit inmates every two weeks because the dentist did not want to restrict treatment for inmates from the major institution.

Although there are currently no written requirements from central office to help ensure field unit inmates access to a major institution’s dental clinic, the chief dentist stated that the provision of dental care will be better organized when new institutions are operational. At that time, the chief dentist plans to develop guidelines which will specify which major institutions will provide dental treatment to which field units.

Two Field Units Do Not Have Access to a Major Institution’s Dental Clinic. Currently, the informal arrangements have resulted in two field units having no access to DOC dental services for their inmates. Halifax and Botetourt field units do not have major institutions providing dental services for their inmates. As a result, these field units have had to secure services from private dentists.

Until April 1992, Halifax and Baskerville field units received dental services from Mecklenburg Correctional Center. Mecklenburg stopped providing these services when its dentist retired. From April through September, the retired dentist was hired on a part-time basis to treat emergencies for Mecklenburg inmates. During this time period, Halifax inmates did not have access to any dental treatment, except emergencies which were sent to a private dentist. In September 1992, Mecklenburg hired two half-time dentists who will provide services for Mecklenburg and Baskerville. Halifax had to secure a contract with a private dentist.

* * *

The Botetourt field unit is also not served by a major institution’s dental clinic. Botetourt contracts with a private dentist for dental services one day per week and reported spending $86,108 on private dental services in FY 1992. The Botetourt superintendent is attempting to provide dental services within the facility by assembling an on-site dental clinic. He purchased used dental equipment, including two dental operatories, for $9,000. The superintendent stated that he plans to provide dental services in the clinic for three field units — Botetourt, Chatham and Patrick Henry.
It appears that the Botetourt dental clinic could be a cost effective way to help ensure access to dental care for field unit inmates. The Botetourt superintendent has requested dental staff from the department, but currently no staff have been approved and the clinic is not operational. The three field units that are to be served by the clinic reported spending a total of $98,694 for outside dental services in FY 1992. The Botetourt superintendent estimates that staffing the clinic would cost between $60,400 and $92,200 for a full-time dentist and hygienist. Therefore, it appears that the department could improve access to dental treatment for three field units and reduce departmental costs by staffing the Botetourt dental clinic.

**Recommendation (14).** The Department of Corrections should make it a priority to hire full-time staff for the dental clinic at the Botetourt field unit. The department should allow contract positions to be hired to provide dental care at the Botetourt field unit until full-time positions can be established and filled.

Field Unit Inmates Have Longer Waiting Periods for Dental Treatment

Waiting periods for dental care are longer for inmates in facilities that do not have an on-site dental clinic. As noted previously, these facilities include all field units and James River Correctional Center. In fact, 57 percent of field unit nurses reported a waiting period of more than one day for a dental emergency while only 19 percent of major institution dentists reported a waiting period of more than one day for a dental emergency. Field unit nurses also reported longer waiting periods than major institution dentists reported for other types of dental treatments (Figure 6). James River, which does not have an on-site dental clinic, reported some of the longest waiting periods of the major institutions for all types of dental treatment.

![Figure 6](image)

**Figure 6**

**Average Inmate Waiting Periods for Dental Treatment**

<table>
<thead>
<tr>
<th></th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-emergencies</strong></td>
<td></td>
</tr>
<tr>
<td>with pain</td>
<td>3</td>
</tr>
<tr>
<td>without pain</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>80</td>
</tr>
<tr>
<td><strong>Cleanings</strong></td>
<td>991</td>
</tr>
<tr>
<td></td>
<td>175</td>
</tr>
</tbody>
</table>

Source: JLARC survey of Department of Corrections dental staff, summer 1992.
Reported waiting periods also vary among field units. The waiting period for emergencies reportedly varies from less than one day to ten days, for non-emergencies with pain from one day to 60 days, for non-emergencies without pain from six days to 240 days, and for cleanings from 18 days to one year (Table 13).

### Table 13

**Number of Days Inmates Wait for Various Treatment Requests**

<table>
<thead>
<tr>
<th>Field Unit</th>
<th>Emergencies</th>
<th>Non-Emergencies With Pain</th>
<th>Non-Emergencies Without Pain</th>
<th>Cleanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appalachian</td>
<td>1 or less</td>
<td>1</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>Baskerville</td>
<td>10</td>
<td>60</td>
<td>135</td>
<td>270</td>
</tr>
<tr>
<td>Botetourt</td>
<td>3</td>
<td>4</td>
<td>11</td>
<td>28</td>
</tr>
<tr>
<td>Caroline</td>
<td>3</td>
<td>11</td>
<td>210</td>
<td>365</td>
</tr>
<tr>
<td>Chatham</td>
<td>2</td>
<td>7</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Chesterfield WR</td>
<td>2</td>
<td>8</td>
<td>105</td>
<td>180</td>
</tr>
<tr>
<td>Cold Springs</td>
<td>7</td>
<td>30</td>
<td>180</td>
<td>365</td>
</tr>
<tr>
<td>Dinwiddie</td>
<td>1 or less</td>
<td>5</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Fairfax</td>
<td>1 or less</td>
<td>7</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Halifax</td>
<td>2</td>
<td>11</td>
<td>60</td>
<td>105</td>
</tr>
<tr>
<td>Harrisonburg</td>
<td>2</td>
<td>2</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Haynesville</td>
<td>1 or less</td>
<td>3</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Patrick Henry</td>
<td>7</td>
<td>14</td>
<td>28</td>
<td>180</td>
</tr>
<tr>
<td>Pocahontas</td>
<td>1 or less</td>
<td>1</td>
<td>49</td>
<td>135</td>
</tr>
<tr>
<td>Pulaski</td>
<td>7</td>
<td>18</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Rustburg</td>
<td>2</td>
<td>5</td>
<td>105</td>
<td>150</td>
</tr>
<tr>
<td>Stafford</td>
<td>1 or less</td>
<td>2</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Tazewell</td>
<td>1 or less</td>
<td>5</td>
<td>21</td>
<td>90</td>
</tr>
<tr>
<td>Tidewater</td>
<td>1 or less</td>
<td>11</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>White Post</td>
<td>1 or less</td>
<td>2</td>
<td>45</td>
<td>240</td>
</tr>
<tr>
<td>Wise</td>
<td>2</td>
<td>3</td>
<td>150</td>
<td>270</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>10</td>
<td>80</td>
<td>175</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** A blank space indicates a missing response.

**Source:** JLARC survey of Department of Corrections dental staff, summer 1992.
Some field unit nurses reported that longer waiting periods may be attributed to a reluctance of some field units to send inmates to private dentists because of the high costs. Some field units that have agreements with institution dental clinics will reportedly send inmates to a private dentist only when an emergency cannot be treated by an institution dentist or when waiting periods for routine treatment at an institution dental clinic become excessive. For example:

One field unit nurse reported that the major institution serving the field unit will treat five inmates per week. The field unit has a population of 113 inmates. Therefore, it would take approximately 23 weeks for all the inmates to be treated. As of August 1992, the field unit nurse was working on the December 1991 dental list. The nurse stated that, “More appointments within DOC would eliminate the number needed to be treated by a private dentist.”

* * *

Another field unit nurse indicated that restricted access to a major institution dental clinic causes increases in dental problems and costs more in the long run. Her field unit has more than 100 inmates and the major institution serving the field unit will treat five inmates per week. According to this nurse, “More inmates need to be seen (by the major institution dentist) because we are receiving men with very bad teeth. Their problems become worse and it costs us when (the inmate) is seen as an emergency by a private dentist.”

Formal written guidelines outlining which major institutions will provide dental services for field units and how many field unit inmates will be treated should improve inmate access to dental treatment. This should also decrease the treatment waiting periods for inmates in these facilities. Further, increased staffing and equipment in institution dental clinics could improve dental care access and reduce costs by alleviating the need to send inmates to private dentists.

**Recommendation (15).** As part of the development of the dental staffing plan, the Department of Corrections should develop formal written guidelines which clearly delineate where inmates residing in facilities without dental clinics will receive dental treatment.

**Recommendation (16).** As part of the development of the dental staffing plan, the Department of Corrections should determine the costs and benefits of adding staff to existing DOC dental clinics to help ensure improved access to dental care while providing cost savings by decreasing private dental expenses.
Appendix A

Item 15-A, 1992 Appropriation Act

The Joint Legislative Audit and Review Commission shall examine the increasing costs of inmate health care in the state correctional system. The objective of this study shall be to determine the appropriate level of inmate health care while developing mechanisms for restraining the growth of costs. The Commission shall report on its progress to the 1993 General Assembly and to each succeeding session until its work is completed. In carrying out this review, Virginia Commonwealth University, the Departments of Corrections, Health, Medical Assistance Services, and Mental Health, Mental Retardation and Substance Abuse Services, and the Auditor of Public Accounts shall cooperate as requested and make available all records, information and resources necessary for the completion of the work of the Commission and its staff.
Appendix B

Agency Responses

As part of an extensive data validation process, all involved agencies are given the opportunity to comment on an exposure draft of each JLARC report. This appendix contains responses from the Public Safety secretariat and the Department of Corrections.

Appropriate revisions have been made to this final report. Page references in the Department of Corrections' response relate to an earlier draft and may not correspond to page numbers in this version of the report.
Mr. Philip A. Leone  
Director, Joint Legislative Audit and Review Commission  
Suite 1100, General Assembly Building, Capitol Square  
Richmond, Virginia 23219

Dear Mr. Leone:

I have reviewed the exposure draft of your interim report,  
Review of Inmate Health Care: Dental Care.  
I do not disagree with any of the recommendations in the report, however; I concur with the concerns of the Department of Corrections. Those specific concerns have been addressed to you by the Department of Corrections in a separate response.

Sincerely,

[Signature]

Theophlise Twitty  
Deputy Secretary of Public Safety

TT/aka-p
December 9, 1992

Philip A. Leone, Director
Joint Legislative Audit and Review Commission
Suite 1100, General Assembly Building
Capitol Square
Richmond, Virginia 23219

Dear Mr. Leone:

This is in response to the exposure draft of the Interim Report, Review of Inmate Health Care: Dental Care dated November 23, 1992.

I am in general agreement with the findings and recommendations of the exposure draft. According to JLARC, inmate health care in Virginia consumes approximately 8% of the total correctional budget. This places the Commonwealth in the median range for correctional health care expenditures. We must continue to develop cost control measures while concurrently assuring that constitutionally adequate health care is accessible to the inmates in our prisons.

The Commission's report is silent on funding recommendations to the 1993 General Assembly. As its top priorities, the Department has proposed a number of amendments to address correctional health care problems, including some of those mentioned in the Report. The Commission's support for these would be appreciated.

Finally, by attachment, I have included specific comments and suggestions which were presented to you and your key staff on December 4 and 7, 1992.

Respectfully,

E. W. Murray

EWM/RBK/cfg

Attachment
This interim report on Dental care dated November 23, 1992 is the first of four JLARC reports which will examine the healthcare costs of the Department of Corrections. The other three reports will focus on the review of mental health care, medical care and the organization and management of inmate healthcare.

The Department's response is in two components. A review of the narrative of the report and a review of the recommendations made by JLARC. The review is numerical by page number of the report.

Page 2 para 3

JLARC comment: North Carolina is using Medicaid guidelines to make treatment decisions.

DOC response: Headquarters staff contacted North Carolina - they are not using Medicaid. Moreover information available to DOC indicates that DOC costs are approximately 66% of Virginia Medicaid costs on a cost per eligible person basis. While DOC medical appropriations have increased 13.4% per annum in the last 4 years, Virginia's medicaid costs increased 17% per annum in the same period.

Page 3 para 3

JLARC comments: 175 inmate lawsuits were brought against DOC in the last 2 years.

DOC response: Information in DOC indicates that lawsuits are reducing in absolute numbers and on a per capita basis. As a matter of fact, claims per 1,000 inmates decreased from 9.73 in 1989 to 5.88 in 1992.

Page 7 para 3

JLARC comment: Dental service expenditures are not differentiated from medical/mental health services.

DOC response: Dental services and supplies are currently not differentiated. Direct Inmate Cost (DIC) expenditures for dental services are identified by a sub-object class.

Page 10 para 2

JLARC comment: Future reports ... identifying what types of care may be inappropriate to provide ...

DOC response: It is DOC's belief that ultimately community/national standards of healthcare and, retrospectively the courts will decide the level of care that should be provided.
Page 13 para 1

JLARC comments: data on the number of inmates receiving dental care are not maintained by the department.

DOC response: morbidity reports submitted by institutions detail key dental procedures at each facility on a monthly basis. The DOC currently does not aggregate or analyze this data.

Page 14 para 1

JLARC comment ... more serious medical problems related to an aging inmate population increase healthcare costs.

DOC response: the average age of inmates has not increased appreciably in the past 4 years. In 1989, the average age was 32.14, in 1992, the average age was 32.36.

Para 16 para 1

JLARC comment: Appropriations on a per inmate basis show an increase from $1548 in FY89 to $1,746 in FY92.

DOC response: According to the Virginia Cost Review Council Report in the United States the average per capita expenditures for health care were $2,566 in 1990. These data are mentioned to indicate DOC has taken cost containment initiatives, i.e. Medical Society of Virginia utilization review and second opinion review of off-site care and DOC/ MCV per diem agreements. Also refer to page 2 para 3 comment reference Medicaid.

Page 16 table 2

JLARC comment: number of inmates used for comparison are year end totals.

DOC response: this data does not seem appropriate. Average daily population figures should be used.

Page 18 para 2

JLARC comment: central office planning limited to determining FTE and equipment.

DOC response: central office is developing a strategic plan to address the total medical resources required during the remainder of this decade. Moreover, a consultant group, CARTER GOBLE in concert with Coastal Correctional Healthcare Inc., has been commissioned to assist DOC in the development of management structure, development of data systems, to define/review levels of service and identify and examine costs.

Page 22 - Figure 1 Organizational Chart
DOC Response: The Coordinator of Inmate Programs' title should be changed to State Program Manager, and under this add Community Resource Manager and Substance Abuse Grant Project Coordinator. Add Manager of Classification and Records as direct report to Chief of Operations.

Page 24 para 2

JLARC comment: A total of 150 medical beds are located in 3 major institutions.

DOC response: total number of medical beds should be listed as 110. Beds in North Housing (currently being moved to Deep Meadow) should not be considered medical beds. These beds are assigned to inmates who are physically handicapped or have debilitating medical conditions and are not assigned to general population beds because of environmental obstructions.

Page 26 para 1

JLARC comment: the department always tries to fill full-time positions with state employees rather than contract staff.

DOC response: DOC tries to fill full-time positions with state employees in lieu of agency staffing. Filling positions with contract staff is considered to be an option if services to be provided are cost effective (i.e., physician staffing.)

Page 27 para 1

JLARC comment: DOC does not maintained data which can be used to determine the number of inmates treated by the dental clinics.

DOC response: morbidity reports provide this data, however as noted before, the data is currently not analyzed. The morbidity report is being revised to provide a greater range and scope of information and will be designed for spreadsheet format.

Page 37 para 1

JLARC comment: It is widely recognized that correctional systems are not required to provide complete state-of-the-art dental care.

DOC response: DOC would like the reference that supports this philosophy. There are standards provided by the Virginia Dental Association, OSHA standards regarding dental practices to avoid infection associated with blood borne pathogens, etc.

Page 37 para 4

JLARC comment: Cost of dental care cannot be separated from mental health and medical.

DOC response: See DOC comments for page 7
Page 44 para 1

**JLARC comment:** DOC has not been effective in presenting the cost implication of not funding additional dental positions.

**DOC response:** DOC needs clarification of this comment, cost effective data is submitted as part of the budget request justifications.

Page 44 para 3

**JLARC comment:** DOC does not have a cost reporting system that effectively isolates the cost of providing dental care.

**DOC response:** DOC has a reporting system that operates within the established financial parameters of CARS and PROBUD. To further isolate costs sub-objects class would have to be splintered into a number of sub-object classes. This essentially would establish a two-tier accounting system, one for finance and one for management, with data eventually being retrofitted to meet the CARS and PROBUD reporting systems. Systemically this would seem to be labor intensive with additional FTE required for operational/reporting purposes.

Page 45 para 1

**JLARC comments:** one category of expenditure which would be particularly important to monitor is the cost of care by private dentists and surgeons.

**DOC response:** See above response. DOC cannot maintain costs that CARS does not differentiate. The DOC has a system whereby the Chief Dentist reviews requests for off-site oral surgery and other care.

**JLARC comment:** Inmate population.

**DOC response:** Average daily population figures should be used.

Page 66 para 3

**JLARC comment:** the contact (CMS at GRCC) has a fixed annual cost of 5.8 million

**DOC response:** there is a 6.5% annual inflation factor.
Recommendation 1: The Department of Corrections should revise the Department Operating Procedure 716 to include areas which need to be addressed to ensure that access to quality dental care is being provided to inmates. Specific areas which the department should consider including in the revised department operating procedure include, but are not limited to, defining the dental services that will be provided and who will provide the services to inmates with special health problems; establishing a written plan for where within the system field units are to be provided dental services; delineating the content of dental treatment records; and establishing requirements for recording inmate consent to treatment or refusal of treatment for dental services.

DOC Response: Concur. DOP 716 is undergoing annual review by the Chief Dentist and the dental advisory committee. Revisions will include the suggested procedures. It is anticipated that review and dissemination of changes to DOP 716 will be completed by 5/93.

Recommendation 2: The Department of Corrections should ensure that all institutions and field units develop and disseminate institutional operating procedures for dental services.

DOC Response: Concur. A survey was conducted on November 30. Institutions which do not currently have dental IOP’s will be required to develop them by February 26, 1993.

Recommendation 3: The Department of Corrections should promulgate detailed instructions regarding the coding of dental, mental health, and medical expenditures at the sub-object level. These instructions should be explained and distributed to all staff involved in coding expenditure data.

DOC Response: Concur in principle.

Recommendation 4: The Department of Corrections should establish cost centers which differentiate dental care expenditures from mental health and medical expenditures. Detailed instructions regarding the coding of these cost centers should be promulgated, explained, and distributed to all staff involved in coding expenditure data.

DOC Response: Agree in principle. However this cannot be done within the current CARS/PROBUD structure, eg. would require sub-object 1342 to be split into medical & dental supplies. We also have a problem with separating dental from other medical salaries.

Recommendation 5: The Department of Corrections should ensure that dental care cost data are reviewed by someone in central office at least quarterly. The cost data should be used in evaluating alternative means of providing dental care and in recommending cost containment actions.
DOC Response: Concur.

Recommendation 6: The Department of Corrections should develop a standardized morbidity report form with meaningful service categories. Specific definitions of what services are to be reported and how they are to be reported, including what constitutes a patient visit, should be determined.

DOC Response: Concur. The format of the morbidity report is currently under review for spreadsheet modification and electronic input from institutions. Suggested categories will be incorporated. Estimated completion is 9/93 contingent upon hardware/software acquisition and 1 funded FTE.

Recommendation 7: The Department of Corrections should consider establishing a computerized database for reporting medical service data. A database into which each institution could directly enter data would be most useful and convenient for both the institutions and central office and would facilitate central office analysis of the data.

DOC Response: Concur in principle. Preliminary cost estimates for a state-wide system have been estimated at $800,000.

Recommendation 8: The Department of Corrections should direct the Office of Health Services to take a more active role in directing and overseeing dental care provision.

DOC Response: Concur. However to comply and accomplish the suggested tasks as outlined, one additional FTE is required in OHS. 1 Chief Dentist.

Recommendation 9: To assist in addressing the oversight and monitoring needs of the dental program, the Chief Dentist should devote 50 percent of his time on the statewide administrative duties specified in the position description. The Department of Corrections should explore alternative ways to continue to provide the current level of dental services at Powhatan.

DOC Response: Concur. As recommended in DOC response number 8 the FTE is required in OHS. To continue the present level of service at Powhatan an additional FTE would be required. The continued expansion of correctional facilities statewide, increased inmate population and dental workload associated with this expansion requires the services of a full time chief dentist. However, to preclude deterioration of clinical dental care to inmates at Powhatan no action can be taken until an FTE is identified and funded.

Recommendation 10: The Department of Corrections should systematically collect and maintain service and cost data to be used in evaluating and supporting the need for additional dental staff. These data should include the number of inmates seen by private dentists, the services rendered, and the associated costs. Similar data should be collected and maintained regarding the services provided inmates within
correctional institutions.

DOC Response: Concur. This is the intent of the modification of the morbidity report. However, cost data would not be an integral part of the morbidity data.

Recommendation 11: The Department of Corrections should prepare a dental care staffing plan that links increased staffing with improved productivity and decreased reliance on private dentists. As part of this plan, the Department should examine the types of dental staff employed in an effort to maximize the productivity of the dentists. Dental assistant and dental hygienist positions should be used whenever possible to complete tasks such as sterilizing chairs and instruments, reviewing inmate request forms, scheduling inmates for appointments, filing inmate records, taking x-rays, and cleaning teeth.

DOC Response: In the budget amendment that is currently being considered by DPB, DOC explained the need for dental auxiliary personnel to include dental assistants and hygienists. The justification is based on increased productivity and safety using more technical personnel working with the dentists. Three hygienist and eleven assistant positions were requested in the amendment package for this session of the general assembly. Under the guidelines set by DPB personnel, DOC did not request dentist positions other than the one at Botetourt.

Recommendation 12: As part of the dental staffing plan, the Department of Corrections should delineate alternative means of meeting the oral surgery needs of inmates. The plan should review the reasons that inmates typically need the services of an oral surgeon and how these needs have been met in the past. The projected costs associated with alternative ways of providing oral surgery for inmates should be delineated in the plan.

DOC Response: The largest percentage of oral surgery referrals are for third molar (wisdom teeth) removal. While the general dentist can perform these task according to the state dental code, most are not trained to do this type of surgery. All of the DOC dentists routinely extract teeth in many stages of disrepair, but most refer the impacted third molars that require surgery. An oral surgeon requires special equipment such as monitors, resuscitation equipment, and hand instruments that most institutions do not have and is not considered cost effective to establish this level of care at isolated geographical locations when we have a statewide requirement. Under the ground rules laid down by DPB, no dental equipment was requested in this year’s budget amendment other than OSHA required items. The office of health services administrator and the chief dentist are developing a plan to contract these services to oral surgeons to perform the work at prison locations. Fees would be a negotiated percentage of the private practice fee as we would provide the area in which to work.

Recommendation 13: In conjunction with the development of the dental care staffing plan, the Department of Corrections should delineate the need to explained or establish specific dental clinics and purchase...
additional dental equipment to allow major institutions and field units to treat additional inmates more productively. As part of this plan, the cost-effectiveness of establishing additional dental clinics at field units should be considered.

**DOC Response:** We addressed this situation by attempting to establish a clinic at Botetourt Unit 25. Also, with the construction of seven new prison facilities in the next several years, inmate access to dental care will be enhanced because of geographic proximity of field units to these institutions, projected staffing that will be able to provide the services. Two other possibilities under consideration for future dental clinics are Baskerville Unit 4 and Pulaski Unit 1 because of their large size. We have made previous budget requests to provide dental equipment and staff to accomplish the above which have been unsuccessful thus far.

**Recommendation 14:** The Department of Corrections should make it a priority to hire full-time staff for the dental clinic at the Botetourt field unit. The department should allow contract positions to be hired to provide dental care at the Botetourt field unit until full-time positions can be established and filled.

**DOC Response:** In the budget amendment prepared for this general assembly session, there is a request for staff to operate the clinic at Botetourt.

**Recommendation 15:** As part of the development of the dental staffing plan, the Department of Corrections should develop formal written guidelines which clearly delineate where inmates residing in facilities without dental clinics will receive dental treatment.

**DOC Response:** The chief dentist has developed such a plan. Because of new major facility sites either under construction or identified, the plan will incorporate each one as it comes on line to add to existing major facilities. Units that have no on site dental clinic will have a major institution located in the same geographic region to which it will be assigned to receive services.

**Recommendation 16:** As part of the development of the dental staffing plan, the Department of Corrections should determine the costs and benefits of adding staff to existing DOC dental clinics to help ensure improved access to dental care while providing cost savings by decreasing private dental expenses.

**DOC Response:** There have been budget requests for additional personnel during the past four years to augment current dental staffing statewide. These amendments and addenda have not been funded. Utilization of private dentists will dramatically be reduced if staff are added in locations that have large internal populations and serve field units. Staffing is not the only criterion that affect access and efficiency. Adding equipment in clinics that only have one dental operatory or enlarging areas that were built to serve much less population, will definitely increase productivity. Many of our institutions provide dental care for 50 to 75 percent more population
than for which they were built with no concomitant increase in treatment area or staff.
# JLARC Staff

## Research Staff

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