California State Auditor

BUREAU OF STATE AUDITS

California Department of Corrections:

More Expensive Hospital Services and Greater Use of Hospital Facilities Have Driven the Rapid Rise in Contract Payments for Inpatient and Outpatient Care

July 2004
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CALIFORNIA STATE AUDITOR

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July 27, 2004 2003-125

The Governor of California
President pro Tempore of the Senate
Speaker of the Assembly
State Capitol
Sacramento, California 95814

Dear Governor and Legislative Leaders:

As requested by the Joint Legislative Audit Committee, the Bureau of State Audits presents its audit report concerning the California Department of Corrections (Corrections) and its contracts for hospital medical services. This report concludes that overall, Corrections' payments for hospital care services have risen $59.4 million from fiscal years 1998–99 through 2002–03, and grew at an average rate of 21 percent per year, outpacing the national consumer price index average of 8 percent annual growth for hospital services during this same period. The reasons for this growth can be attributed to the combination of more expensive health care and to Corrections' increased use of contracted hospital facilities. Our analysis indicates that increases in its inpatient hospital payments are driven primarily by more expensive services, whereas increases in its outpatient hospital payments are driven by increases in both the price of services and number of hospital visits.

Two institutions attributed the increases, among other reasons, to changes in contract terms resulting in hospital inpatient payments that were three times as much as they would have paid previously for the same inpatient stay. Further, partly because Corrections pays some hospitals a percentage of the hospital bill when the bill exceeds a contractual threshold rather than base its payment on hospital cost, Corrections paid some hospitals amounts that were from two to eight times the amounts Medicare would have paid the same hospitals for the same services. One of these hospitals included a hospital operated by the Tenet Healthcare Corporation, for which Corrections paid eight times the amount that Medicare would have paid for the invoices we reviewed.

Similarly, one institution's payments for outpatient services increased significantly primarily because its average payment per emergency room outpatient visit, which are paid at a percentage of the hospital bill without a maximum limit, increased from less than $950 per visit to more than $3,300 per visit. Moreover, a second institution could not say why its number of outpatient hospital visits increased from 147 to 630 between fiscal years 1998–99 and 2002–03, in part, because the institution, not unlike other institutions, did not consistently enter into Corrections' computer database codes that would allow it to know the procedures it paid for. Additionally, similar to its inpatient hospital payments, because Corrections typically pays hospitals a percentage of their billed charges for outpatient services, rather than base its payments on hospital costs, it paid on average two and one-half times the amounts Medicare would have paid for the same outpatient services.

Respectfully submitted,

Elaine M. Howle

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State Auditor

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SUMMARY

Audit Highlights . . .

Our review of the California Department of Corrections' (Corrections) contracts for medical services revealed the following:

- ☑ *Corrections' hospital payments have risen $59.4 million from fiscal years 1998–99 through 2002–03, growing at an average rate of 21 percent per fiscal year.*
- ☑ *Inpatient hospital payments increased by $38.5 million from fiscal years 1998–99 through 2002–03, primarily driven by increased payments per hospital admittance.*
- ☑ *Outpatient hospital payments increased by $12.7 million from fiscal years 1998–99 through 2002–03, driven by both increased payments per hospital visit and increased numbers of hospital visits.*
- ☑ *Two institutions attributed their inpatient hospital payment increases, among other reasons, to changes in contract terms resulting in hospital payments that were three times as much as they would have paid previously for the same inpatient stay.*

continued on next page . . .

RESULTS IN BRIEF

The level of health care the California Department of Corrections (Corrections) provides inmates housed in its 32 correctional institutions (institutions) varies depending on whether the institution contains a skilled nursing facility, a general acute care hospital, a correctional treatment center, or an outpatient housing unit.[1] Medical care that an institution cannot provide within its walls is administered by a public or private hospital on either an inpatient or outpatient basis. From fiscal years 1998–99 through 2002–03, the average total inmate population has remained relatively constant at about 160,000 inmates, with roughly 151,000 inmates housed at institutions and 9,000 at community-based facilities. However, during this four-year period, Corrections' hospital payments increased $59.4 million, from $53.2 million to $112.6 million, averaging a 21 percent rate of growth per year. In contrast, the consumer price index for hospital services averaged less than 8 percent annual growth from 1998 through 2003. For Corrections, the growth was most evident beginning in fiscal year 2000–01 with a 37 percent increase over the prior year. Of the $59.4 million increase, $38.5 million related to inpatient hospital payments, $12.7 million to outpatient services, and $8.2 million to other hospital payments.

Our analysis of inpatient hospital payments with associated admission numbers found that 71 percent of the increase Corrections experienced in the four-year period could be attributed to increased costs per admittance and 29 percent to a greater number of admittances to hospitals with which Corrections contracts. The primary driver, increased costs per admittance, relates to either Corrections paying a higher price for the same service or to an increase in the complexity of cases for which inmates were admitted to the hospital. We were unable to determine the extent to which more-complex cases were contributing to increased costs because Corrections did not consistently require and enter into its computer database the necessary data, such as the diagnosis related group (DRG)

[1] Although California currently has 32 adult correctional institutions, 33 institutions were counted in this audit because the Northern California Women's Facility made payments for hospital services during fiscal year 2002–03 but was deactivated early in 2003.

- ☑ *Corrections paid some hospitals amounts that were from two to eight times the amounts Medicare would have paid the same hospitals for the same inpatient services, including a hospital operated by Tenet Healthcare Corporation, which was paid eight times the amount Medicare would have paid.*
- ☑ *One institution's outpatient hospital payments increased by $821,000 primarily because its average payment per emergency room visit, which are paid at a percentage of the hospital bill without a maximum limit, increased from less than $950 per visit to more than $3,300 per visit.*
- ☑ *Corrections' outpatient payment amounts averaged two and one-half times the amount Medicare would have paid for the same services.*
- ☑ *A lack of key data being entered into Corrections' database limits analyses behind causes of increased payments and utilization, such as the extent to which case severity is a cause.*

code, which indicates the typical level of hospital resources for a particular inpatient hospital case and is an important factor in determining if there was an increase in the severity level across all DRGs. For example, in its computer database, Corrections recorded DRG codes in only 482 of 5,779 inpatient hospital payment records in fiscal year 2002–03.

In contrast, our analysis of outpatient hospital payments revealed that higher prices and more outpatient visits were roughly equal drivers of increasing costs, with $6.9 million of the increase attributable to increased costs per visit and $5.8 million attributable to the increased number of visits. As with inpatient payments, however, Corrections entered incomplete medical procedure codes, thus hampering its ability to analyze and determine the reasons why its outpatient costs increased.

Higher numbers of costly cases significantly affected Corrections' rising costs for both inpatient and outpatient hospital care. Although payments for inpatient hospital cases costing less than $50,000 increased 68 percent from fiscal years 1998–99 through 2002–03, payments for cases costing $50,000 or more increased 254 percent. For example, in the four-year period, the number of cases costing more than $200,000 increased from seven to 25, with two exceeding $670,000 each.

For outpatient visits, payments related to cases costing less than $1,000 increased 73 percent over the four-year period, and payments for cases costing $5,000 or more tripled in fiscal year 2002–03 compared with two years earlier. Of equal importance for outpatient costs is that the number of outpatient visits nearly doubled from approximately 7,500 to 14,900, even though the number of inmates remained relatively constant. This doubling of outpatient visits also has a significant effect on Corrections' nonhospital costs because each inmate visiting an outpatient facility must be transported and guarded by correctional officers, who are frequently paid at an overtime rate for these tasks.

When we asked selected correctional institutions why their inpatient or outpatient costs increased dramatically from fiscal years 1998–99 through 2002–03, we received some insightful information. Two institutions performed analyses showing that changes in contract terms resulted in their paying hospitals three times as much as they previously paid for the same inpatient stay. One of these institutions also said it had fewer inpatient beds because, according to the Department of Health Services' standards, its inpatient rooms were not suited to house two medical patients.

Another factor this institution cited as contributing to higher inpatient costs was a larger number of inmates with complex medical and mental health issues that led to an increase in hospitalizations for drug overdoses and seizure disorders.

To test the reasonableness of what Corrections paid hospitals for inpatient services, we compared Corrections' payments to what Medicare would have paid hospitals for the same services, including an allowance for exceptional cases. This analysis showed that for more than half of the 15 hospitals we reviewed, Corrections paid amounts that were from two to eight times the amounts Medicare would have paid the same hospitals for the same services. To more fully understand the inpatient hospital payments that were multiples of Medicare payments, we reviewed contracts related to these hospitals and found that the addition of stop-loss provisions significantly increased Corrections' costs. Stop-loss provisions are intended to protect hospitals from incurring financial losses for exceptional cases in which patients develop complications that cause their hospital stays to be longer or more expensive than anticipated. In Corrections' stop-loss cases, once cumulative hospital charges for a case exceeded a contractual threshold amount, Corrections paid the hospitals a percentage of their billed charges rather than a per diem rate for typical cases. If Corrections had been able to negotiate hospital contracts without its typical stop-loss provisions, we estimate that Corrections might have saved at most approximately $9.3 million in fiscal year 2002–03 for the six hospitals we reviewed that have stop-loss provisions in their contracts. With better negotiated stop-loss provisions, Corrections may have achieved some of these savings at these six hospitals if its stop-loss provisions had not paid the hospitals a discount from billed charges for the entire stay. Instead, a better arrangement would be to pay per diem for the days up to when the stop-loss threshold is met, then pay the hospitals' costs plus a reasonable percentage for the remaining days of the inpatient stay.

We performed additional analysis on publicly available data and found that the hospitals we reviewed had costs that on average were from 8 percent to 54 percent of their billed charges. Thus, even if Corrections paid a discount on the billed charges, it paid much more than the hospitals' costs. For example, one hospital operated by the Tenet Healthcare Corporation, for which our review of a sample of 2002–03 payments revealed that Corrections paid eight times the rate that Medicare would have paid, had an operating profit margin of approximately 71 percent on the payments it received from Corrections.

We also asked institutions that had experienced significant increases in outpatient costs to explain what they knew about the cost drivers. One institution said the facility charge for a routine scheduled appointment increased 143 percent from fiscal years 1998–99 through 2002–03. This institution also indicated that its increasing costs resulted from its growing population of reception-center inmates. A reception center provides short-term housing to inmates who are just entering the correctional system and must be processed, classified, and evaluated. According to this institution, unlike inmates who have been in the system and receiving regular health care, many reception-center inmates have severe health problems that have been neglected in their previous environments (county jails or parole) and require expensive and immediate outpatient treatment. However, a closer analysis of this institution's outpatient payments revealed that its outpatient hospital costs increased significantly primarily because of significant increases in its average payment per outpatient visit to an emergency room, which is paid at a percentage of the hospital bill without a maximum limit.

In contrast with the assertions of this institution, we found that the increase in costs for outpatient visits was higher at some institutions that did not have reception centers than at others that did have them. In addition, inmates at some institutions that did not have reception centers went to outpatient visits more frequently than did inmates at some institutions with reception centers. For example, at California State Prison, Sacramento, which does not have a reception center, an average of one in five inmates visited an outpatient facility, while at North Kern State Prison, which does have a reception center, an average of one in 24 inmates visited an outpatient facility.

At California State Prison, Sacramento, the health care manager could not say why the number of outpatient visits increased from 147 to 630 per year over the four-year period, in part because the institution entered into Corrections' computer database certain outpatient procedure codes for only two of its outpatient payment records in fiscal year 1998–99 and for none of its outpatient payment records for fiscal year 2002–03.

Finally, we compared Corrections' payments for outpatient hospital services to what Medicare would have paid hospitals for the same services. We found that because Corrections typically pays a percentage of a hospital's billed charges rather than costs for its outpatient services, it paid on average two and one-half

times the amounts Medicare would have paid for the same outpatient services. These higher payments were most evident with Corrections' payments for emergency room outpatient services that are typically paid without a limit. The significant difference in Corrections' payments to what Medicare would have paid indicates that Corrections could possibly achieve significant savings if it could pay the same rates as Medicare for its outpatient services. Medicare bases its outpatient payments on an estimate of the resources used by hospitals and their associated costs for the services provided. Although not a statistically valid estimate, as a rough illustration of the potential savings that Corrections might achieve if it could pay the same rates as Medicare and if the outpatient payments we reviewed were representative of its nearly 15,000 outpatient payments, Corrections could potentially reduce the $19.8 million it spent on outpatient hospital services in fiscal year 2002–03 to $8.4 million. Although we realize that the potential savings of $11.4 million may not be entirely achievable, the potential for Corrections to achieve some level of savings appears significant if it based its outpatient hospital payments on the cost of hospital resources used, similar to Medicare.

RECOMMENDATIONS

To understand the reasons behind the rising trend in its hospital payments, Corrections should do the following:

- Enter complete and accurate hospital billing and medical procedures data in its computer database for subsequent comparison and analysis of the medical procedures that hospitals are performing and their associated costs.

- Perform regular analysis of its health care cost and utilization data, monitor its hospital payment trends, and investigate fully the reasons why its costs are rising for the purpose of implementing cost containment measures.

- Follow up with all correctional institutions using new hospital contracts to determine if renegotiated contract payment terms are resulting in significantly higher costs for them as well.

To control increases in inpatient and outpatient hospital payments caused by hospital contract payment provisions, Corrections should do the following:

- Revisit hospital contract provisions that pay a discount on the hospital-billed charges and consider renegotiating these contract terms based on hospital costs rather than hospital charges. Corrections could use either existing cost-based benchmarks, such as Medicare or Medi-Cal rates, or hospital cost-to-charge ratios to estimate hospital costs and negotiate contract rates from those costs. Further, should Corrections renegotiate hospital contract payment terms, it should perform subsequent analysis to quantify and track the realized savings or increased costs resulting from each renegotiated contract.

- Require hospitals to include DRG codes on invoices they submit for inpatient services to help provide a standard, along with hospital charges, by which Corrections can measure its payments to hospitals as well as case complexity.

- Detect abuses of contractual stop-loss provisions by monitoring the volume and total amounts of hospital payments made under stop-loss provisions.

To control rising inpatient and outpatient hospital payments caused by increases in the number of hospital admissions or visits, Corrections should do the following:

- Include in its utilization management quality control process a review of how medical staff assess and determine medical necessity, appropriateness of treatment, and need for continued hospital stays.

- Investigate the reasons why the number of outpatient visits by inmates has nearly doubled even though the inmate population has remained relatively constant, and implement plans to correct the significant increase in outpatient hospital visits.

AGENCY COMMENTS

Corrections agreed with our recommendations and stated that the recommendations, as presented, would help guide it with future management decisions regarding inpatient and outpatient care for its inmates. ■

INTRODUCTION

BACKGROUND

The California Department of Corrections (Corrections) operates 32 correctional institutions (institutions), oversees various community correctional facilities, and supervises parolees' reentry into society.[2] As of April 30, 2004, Corrections' population totaled nearly 163,000 inmates. The average inmate population for fiscal years 1998–99 through 2002–03 was 160,000, with approximately 151,000 inmates housed at institutions and 9,000 at community-based facilities.

Corrections is organized into four programs: the institution program, the community correctional program, the central administration program, and the health care services program. The health care services program provides mandated health care to Corrections' inmate population and comprises the medical, dental, and psychiatric services sections at the institutions as well as the Health Care Services Division (HCSD) at Corrections' headquarters. For fiscal year 2003–04, Corrections projected it would dedicate $974 million, or 17 percent, of its $5.7 billion budget to the health care services program.

Corrections' payments to hospitals for medical services provided to inmates totaled $112.6 million in fiscal year 2002–03. As Figure 1 on the following page shows, Corrections paid hospitals $72.1 million for inpatient services, $19.8 million for outpatient services, and the remaining $20.7 million for other hospital services, such as physician, ambulance, and laboratory services.

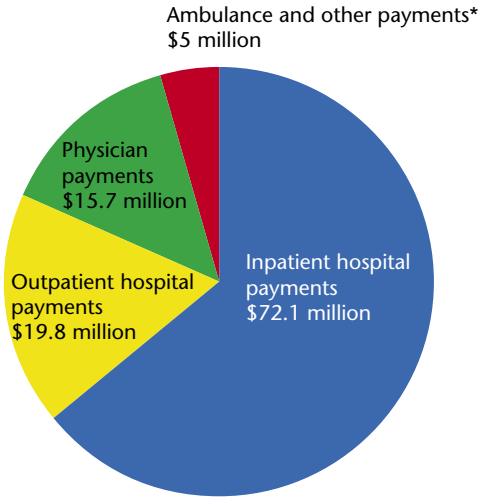
HEALTH CARE IN CORRECTIONAL FACILITIES

To provide medically necessary health care to inmates, Corrections operates four types of health care facilities: four general acute care hospitals, 14 correctional treatment centers, 13 outpatient housing units, and one skilled nursing facility. Additionally, it contracts with the Department of Mental Health to provide all inpatient acute mental health services to certain inmates at the California Medical Facility in Vacaville and to

[2] Although California currently has 32 adult correctional institutions, 33 institutions were counted in this audit because the Northern California Women's Facility made payments for hospital services during fiscal year 2002–03 but was deactivated early in 2003.

FIGURE 1

The California Department of Corrections Made $112.6 Million in Hospital Payments in Fiscal Year 2002–03



Source: California Department of Corrections' health care cost and utilization program database.

* Other payments were for laboratory, dental, psychiatric, and other medical services.

some of the inmates at the correctional treatment center at Salinas Valley State Prison. For care not available in its own facilities, Corrections contracts with medical service providers in the surrounding communities, including hospitals. Table 1 presents the types of health care facilities, the number of doctors available on site, the average daily inmate population, and the average daily inmate population per doctor at each institution during fiscal year 2002–03.

CORRECTIONS' ROLE IN CONTROLLING HEALTH CARE COSTS

The mission of Corrections' HCSD is to manage and deliver to the State's inmate population health care consistent with adopted standards for quality and scope of services within a custodial environment. HCSD is composed of two branches, and although it is centrally located in Sacramento, most staff responsible for managing and delivering health care services

TABLE 1

Each Correctional Institution Had a Specific Type of Facility to Provide Health Care to Inmates in Fiscal Year 2002–03

Correctional Institution	Health Care Facility*	Physicians and Surgeons on Site	Average Daily Inmate Population	Average Daily Inmate Population Per Physician and Surgeon
California Institution for Men	HOSP	17.3	6,446	373
California Medical Facility	HOSP	18.0	3,289	183
California Men's Colony	HOSP	18.1	6,505	359
California State Prison, Corcoran	HOSP	13.6	4,862	358
California State Prison, Los Angeles County	CTC	6.9	4,177	605
California State Prison, Sacramento	CTC	5.7	2,977	522
California State Prison, Solano	CTC	6.6	5,778	875
California Substance Abuse Treatment Facility in Corcoran	CTC	6.0	6,583	1,097
Centinela State Prison	CTC	6.2	4,502	726
High Desert State Prison	CTC	4.8	4,319	900
Ironwood State Prison	CTC	6.2	4,564	736
Mule Creek State Prison	CTC	4.0	3,628	907
North Kern State Prison	CTC	9.5	5,040	531
Pelican Bay State Prison	CTC	5.0	3,278	656
Pleasant Valley State Prison	CTC	7.6	4,569	601
R. J. Donovan Correctional Facility	CTC	8.2	4,345	530
Salinas Valley State Prison	CTC	7.0	4,186	598
Wasco State Prison	CTC	10.3	5,989	581
Avenal State Prison	OHU	9.7	6,882	709
California Correctional Center	OHU	5.6	5,812	1,038
California Correctional Institution	OHU	8.4	5,330	635
California Institution for Women	OHU	6.9	1,676	243
California Rehabilitation Center	OHU	9.1	4,587	504
Calipatria State Prison	OHU	6.3	4,126	655
Chuckawalla Valley State Prison	OHU	5.1	3,613	708
Correctional Training Facility	OHU	10.0	6,922	692
Deuel Vocational Institution	OHU	6.3	3,909	620
Folsom State Prison	OHU	7.5	3,714	495
Northern California Women's Facility†	OHU	1.0	409	409
San Quentin State Prison	OHU	10.4	5,736	552
Sierra Conservation Center	OHU	7.2	6,332	879
Valley State Prison for Women	OHU	6.5	3,262	502
Central California Women's Facility	SNF	9.5	3,254	343

Sources: California Department of Corrections' (Corrections) Health Care Services Division; fiscal year 2004–05 California Salaries and Wages; Corrections' Estimates and Statistical Analysis Section, Offender Information Services Branch.

* **Health Care Facilities:**

HOSP General acute care hospital: provides 24-hour inpatient care, including basic services such as medical, nursing, surgical, anesthesia, laboratory, radiology, pharmacy, and dietary.

CTC Correctional treatment center: provides inpatient health care to inmates who do not require acute care but need health care beyond that normally provided in the community on an outpatient basis.

OHU Outpatient housing unit: typically houses inmates who do not require admission to a licensed health care facility but need monitoring or isolation from the general prison population.

SNF Skilled nursing facility: provides continuous skilled nursing and supportive care to inmates on an extended basis, including services such as medical, nursing, pharmacy, dietary, and an activity program.

† The Northern California Women's Facility was deactivated early in 2003.

are located in the correctional institutions. HCSD's health care managers and utilization management assistance teams are located in correctional institutions throughout the State and organized by region—northern, central, and southern—as shown in Figure 2. The health care managers, who are overseen by three regional administrators, administer and manage health care programs in the field based on statewide priorities, policies, and performance requirements. The registered nurses responsible for conducting reviews to determine the appropriateness of charges for inmate health care services are grouped into three regional teams in the utilization management program, which is part of the quality management assistance program.

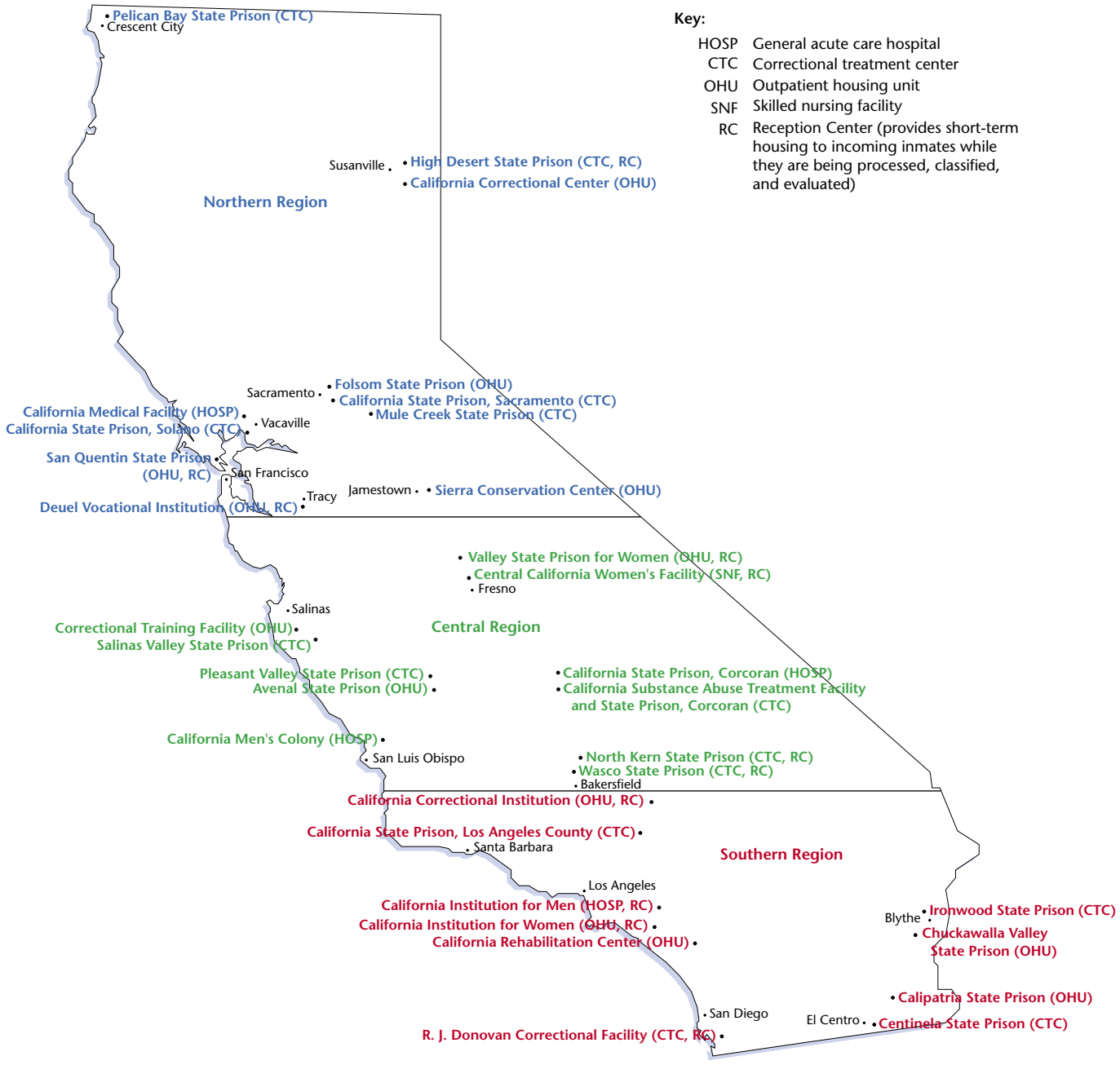
The fiscal and business management section of HCSD also has analysts organized by region. HCSD's health care and cost utilization program (HCCUP) has analysts within each institution. The HCCUP uses a health care database to track cost and utilization data related to all types of health care services provided to inmates. The HCCUP database, which uses Microsoft Access database software, contains information such as which inmates received health care services, the dates of services, the principal diagnoses, and the estimated costs of and actual payments for the services rendered. The HCCUP analyst at each institution reviews the invoices health care providers submit to the institution to ensure that the charges are paid in accordance with the rates of compensation in the providers' contracts and enters information from the invoices into the HCCUP database for later reporting of health care cost and utilization information.

BENCHMARK SET BY PAYMENTS CALCULATED UNDER MEDICARE

To determine how much to pay for a particular health care service, Medicare considers various factors that affect the costs the hospital incurs to provide the service. Therefore, Medicare payments are useful benchmarks from which to compare and analyze Corrections' payments to hospitals. Analyzing Corrections' payments to hospitals for inpatient and outpatient services requires looking at the differences among medical cases as well as the differences among hospitals. Differences among medical cases include, but are not limited to, the principal diagnosis; the medical procedures performed; and the patient's

FIGURE 2

Each Correctional Institution in California Has a Health Care Facility



Source: California Department of Corrections' Web site.

Note: Although California currently has 32 adult correctional institutions, 33 institutions were counted in this audit because the Northern California Women's Facility made payments for hospital services during fiscal year 2002–03 but was deactivated early in 2003. For more detailed descriptions of the health care facilities, see Table 1 on page 9.

age, sex, and discharge status. Medicare uses these factors to classify medical cases according to a list of diagnosis related groups (DRGs). For each DRG, Medicare assigns a payment weight based on the average resources used to treat patients in that group. Additionally, differences among hospitals include geographic-related factors such as the prevailing wage level in the hospital's community, the volume of low-income patients the hospital serves, and whether the hospital is an approved teaching facility. Medicare also evaluates the costs hospitals incur to determine if any additional payments for unusually expensive cases are appropriate to help protect hospitals from large financial losses.

RESULTS FROM OUR RECENT AUDIT OF CORRECTIONS' HEALTH CARE SERVICES CONTRACTS

Our April 2004 audit report titled *California Department of Corrections: It Needs to Ensure That All Medical Service Contracts It Enters Are in the State's Best Interest and All Medical Claims It Pays Are Valid* reported that despite public policy and Corrections' policies supporting the practice, Corrections did not competitively bid most of its contracts for medical services. Additionally, the report determined that institutions did not adhere to Corrections' utilization management program, which was established to ensure that inmates receive quality care at contained costs. Consequently, the report concluded, institutions paid excessive amounts for some services and incurred unnecessary costs for the State.

Specifically, the report revealed that instead of competitively bidding many of its contracts for medical services, both the institutions and HCSD relied on a 30-year-old state policy exemption that allowed them to award contracts for most medical services without seeking competitive bids. The report noted that the Department of General Services could not provide any documentation to support the original justification for the policy exemption and had not evaluated whether it was valid. The report concluded that by not competitively bidding its contracts, Corrections failed to ensure that the State met the medical needs of inmates at competitive prices.

The report also discussed how Corrections could dramatically lower total hospital expenses by using certain methods of compensation rather than others. For example, the report stated that, generally, Corrections paid less when it was able to negotiate

per diem, or daily, fees for specific services or outcomes regardless of the actual charges. Further, the report noted that the effect of Corrections' negotiated compensation method on the State's costs was also apparent in expenditures for individual procedures, such as physician procedures, for which Corrections had a wide variety of rates compared with those established by Medicare.

Another point we made in our earlier report was that not only was Corrections unable to demonstrate that its contracts were in the State's best interest, but also institutions may have been paying inappropriate and invalid medical claims. The report discussed how institutions did not comply with HCSD's utilization management program, established to ensure that inmates receive quality care at contained costs. The utilization management program requires institutions contracting for medical services to perform three reviews—prospective, concurrent, and retrospective—to ensure that medical services and prices are appropriate. However, the report found that institutions could not show that they performed the prospective and concurrent reviews. Further, several deficiencies in the retrospective reviews institutions conducted resulted in overpayments for medical services and possibly in payments for nonexistent services. Additionally, nurses with the utilization management program were not consistently reviewing a set percentage of medical service invoices to verify that the charges were appropriate, and the institutions' HCCUP analysts did not always identify discrepancies between contract rates and medical charges on providers' invoices—or even obtain evidence that medical services were actually received. Consequently, institutions overpaid for some services and incurred unnecessary costs for the State. The report concluded that until HCSD enforced its review policy for nurses in the utilization management program and performed quality control reviews of invoices processed by HCCUP analysts, Corrections could not adequately contain or reduce health care costs at California correctional institutions.

SCOPE AND METHODOLOGY

The Joint Legislative Audit Committee (audit committee) requested that the Bureau of State Audits (bureau) review Corrections' contracts for medical services, including contracts with Tenet Healthcare Corporation (Tenet). Specifically, the audit committee asked the bureau to identify any trends and, to the extent possible, reasons for the trends in the costs Corrections

is paying for contracted inpatient and outpatient health care services and costs for similar services among hospitals as well as hospital systems. Further, the audit committee asked the bureau to compare the costs Corrections is paying Tenet for inpatient and outpatient health care services to the costs paid for similar services at other hospitals and, to the extent possible and permissible, publicly report the results and reasons for any differences. The audit committee also requested that the bureau examine the payment terms for a sample of contracts to determine if they provide the best value to the State and review Corrections' policies and procedures for processing claims for contracted Tenet health care services to determine if Corrections is monitoring and verifying claims before making payments.

To identify any trends in the costs Corrections is paying for contracted health care services, we summarized Corrections' payments to hospitals by type of health care service, such as inpatient and outpatient services, for fiscal years 1998–99 through 2002–03 and compared the change in payments over the four-year period. To identify the reasons behind the trends in Corrections' hospital payments, we calculated the overall change in its hospital payments in fiscal year 2002–03 from fiscal year 1998–99 and analyzed the change to determine the amount caused by a change in price versus a change in the volume of hospital services. Additionally, we presented our results to HCSD and asked it to provide us with any analysis it might have performed that would explain the reasons behind the trends in its hospital payments and the reasons behind changes in its hospital payments that are caused by changes in price or volume of services. Similarly, we provided our analysis of the change in hospital payments to selected correctional institutions and asked each to explain the reasons for the changes caused by changes in price or changes in volume of services at the institution.

To compare the costs Corrections is paying Tenet for inpatient and outpatient health care services to the costs paid for similar services at other hospitals, we selected 15 hospitals to review, including five Tenet hospitals, and calculated what Medicare would have paid each of these hospitals for similar services. We used these Medicare payments as a benchmark to measure the amounts Corrections paid the 15 hospitals in fiscal year 2002–03 and compared how each hospital fared among the other hospitals we reviewed. Specifically, we stratified and randomly selected a sample of invoices paid in fiscal year 2002–03 for inpatient and outpatient services from each hospital, calculated what Medicare

would have paid for the same hospital services, calculated a ratio of Corrections' payments to what Medicare would have paid each hospital for similar services, and compared each hospital's ratio with those of the other hospitals we reviewed. To determine the reasons for any significant differences in the calculated ratios among these hospitals, we reviewed the contract payment terms for each hospital, presented the results of our analysis to HCSD, and asked it to provide any analysis it might have performed that would explain the reasons behind the differences in amounts paid among the hospitals we reviewed.

Because our April 2004 audit, discussed in the previous section, had already reviewed Corrections' health care contract payment terms, including hospital contracts, to determine if they provided the best value to the State and reviewed its processing of claims for contracted health care services to determine if it is monitoring and verifying claims before making payments, we did not repeat or perform similar audit procedures for the current audit.

During the course of our audit, we performed a variety of tests to determine the reliability of certain data that we used to complete various audit analyses. For example, we verified the total fiscal year 2002–03 payment amounts in the HCCUP database to accounting reports, and the individual HCCUP database hospital payment record amounts to the respective accounting payment records for the hospital invoices we selected to review. We also traced the HCCUP database invoice amounts to the billed charges on the respective inpatient hospital invoices we selected to review. If the billed charge on the hospital invoice did not agree with the HCCUP database invoice amount for more than one of the 10 inpatient invoices we selected to review for that hospital, we did not use the HCCUP database invoice amount for our analysis of that hospital. For medical diagnosis and procedure codes, we limited our analysis to determining the extent to which this data existed in the HCCUP database. We also used other HCCUP database data to identify and classify records as inpatient or outpatient records and those records associated with correctional institutions and hospitals.

Corrections has asserted the privilege contained in California Government Code, Section 6254.14, that permits it to protect from disclosure certain information associated with the negotiation of health care services contracts. This section specifically allows Corrections to protect from disclosure, for up to four years after the related contract or amendment is fully executed, those portions of contracts that contain payment rates. Corrections

asserted that certain information in our report, if associated with the name of a provider, would allow a third party to determine the rates Corrections is paying hospitals. Therefore, Corrections requested that we use generic hospital names—Tenet, non-Tenet, and University hospitals—to replace the actual names of the hospitals in our report. Corrections also requested that we maintain the confidentiality of the hospital contracts and other documents related to contract payment rates and negotiations that we relied on during the course of our audit, based on its assertion of this privilege.

In addition, Corrections expressed concerns that although our report withholds the exact identity of the hospital by using generic hospital names, examples in our report disclose the specific contract payment terms, such as percentages of billed charges, associated with specific institutions, and that this disclosure could allow a third party to then determine the hospital. Corrections asserted to us that in some cases there is only one Tenet or University of California hospital that provides services to the particular institutions named in our examples, thus, permitting a third party to identify the hospital that is the subject of our discussion on specific payment terms. Therefore, because of Corrections' concerns, we simply refer to a "hospital" as the provider of services rather than specify the hospital's actual or generic name and do not disclose the details of contract provisions in examples where we discuss the contract payments terms related to a specific institution.

Further, although state law allows Corrections to protect from disclosure the payment rates of health care services contracts for up to four years after the execution of the contracts or amendments, it does not prohibit Corrections from disclosing these rates and other related information if it chooses to do so. However, Corrections has entered into a contract term that prohibits it from disclosing this information. This term reads as follows:

> [Corrections] is exempt from publicly disclosing the rates of payment contained in [Corrections] health care contracts for four (4) years after the date of execution of a contract or a contract amendment per Government Code Section 6254.14. [Corrections] and Provider agree

> to protect the confidentiality of the rates contained in this contract or contract amendment for four (4) years after the date of execution.

By entering into this contract term, Corrections becomes legally obligated not to disclose the rates contained in contracts with its providers for a period of four years after the date of execution. As a result, Corrections has effectively waived any right it otherwise had under state law to disclose contract payment terms.[3]

Finally, Corrections asserted that disclosure of the floor amount of a stop-loss provision could impact its ability to negotiate future contracts with providers who may insist on like terms, and our disclosure may weaken its negotiating position. Corrections further requested that we not disclose the floor and ceiling amounts of the stop-loss provisions we reviewed to avoid these amounts from becoming the floor and ceiling in future negotiations, as well. We honored its request and do not disclose the floor or ceiling amounts of its various contract stop-loss provisions. ■

[3] Our legal counsel has advised, however, that despite this contract term, Corrections must still comply with other requirements contained in Section 6254.14 of the Government Code that require disclosure of the entire health care services contracts or amendments, including payment rates, to the Joint Legislative Audit Committee and the Bureau of State Audits.

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AUDIT RESULTS

INCREASES IN BOTH THE PRICE PAID FOR CARE AND THE USE OF HOSPITAL FACILITIES DROVE A SUBSTANTIAL RISE IN HOSPITAL PAYMENTS FOR THE CALIFORNIA DEPARTMENT OF CORRECTIONS

In April 2004, we reported that the California Department of Corrections (Corrections) needs to ensure that it awards medical service contracts competitively and that it pays for only valid medical claims. The current report reveals that overall, Corrections' payments for hospital services have risen an average of 21 percent annually since fiscal year 1998–99, outpacing the consumer price index average of 8 percent annual growth for hospital services from 1998 through 2003. Although the factors affecting this trend vary among the 33 institutions that Corrections operated in fiscal year 2002–03,[4] the reasons for the growth can primarily be attributed to a combination of more expensive health care and Corrections' increased use of contracted hospital facilities.

Corrections' Health Care Data Revealed an Upward Trend in Hospital Payments

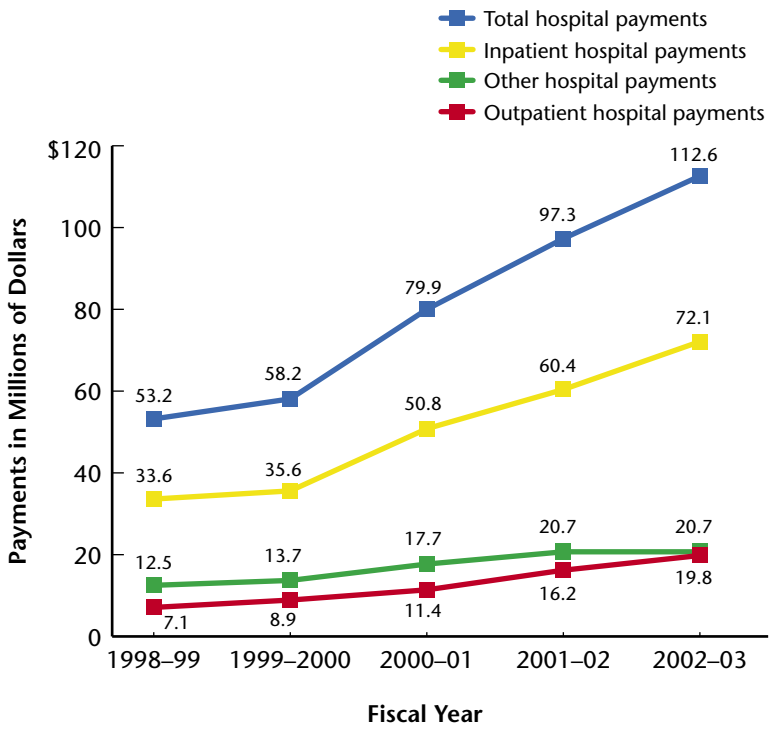
According to the United States Department of Labor, Bureau of Labor Statistics, the consumer price index for hospital services increased nearly 38 percent from 1998 through 2003, based on national data. Thus, the annual increase in consumer prices for hospital services averaged less than 8 percent during this period. Corrections' data on health care services indicate that, in contrast to the national trend, its payments to hospitals have increased at an average rate of 21 percent per year since fiscal year 1998–99, despite average inmate populations in correctional institutions and community-based facilities that have remained relatively stable at approximately 151,000 and 9,000 inmates, respectively. As shown in Figure 3 on the following page, the increase in hospital payments became more pronounced in fiscal year 2000–01, when the growth was more than 37 percent from the prior year. Further analysis revealed that the increase in hospital payments in fiscal year 2000–01 was primarily driven

[4] Although California currently has 32 adult correctional institutions, 33 institutions were counted in this audit because the Northern California Women's Facility made payments for hospital services during fiscal year 2002–03 but was deactivated early in 2003.

by a nearly 43 percent growth in inpatient hospital payments from the prior year. As will be discussed in a later section, this significant increase in inpatient hospital payments appears related, at least in part, to contract terms that were more disadvantageous to Corrections in fiscal year 2000–01 compared with the previous fiscal year.

FIGURE 3

The California Department of Corrections' Hospital Payments Have Grown Since Fiscal Year 1998–99



Source: California Department of Corrections' health care cost and utilization program database.

Additionally, four of the 33 correctional institutions statewide had an increase in average payment per inmate of at least 113 percent in fiscal year 2000–01 from fiscal year 1999–2000. For example, the average payment per inmate at California State Prison, Sacramento, was $204 in fiscal year 1999–2000 and $514 in fiscal year 2000–01, an increase of 152 percent. Appendix A presents Corrections' hospital payment data by institution for each fiscal year from 1998–99 through 2002–03.

Because Corrections' payments for inpatient and outpatient services represented the largest proportion of its payments to hospitals overall, we focused our analysis on these payments. As shown in Appendix A, of the $401.1 million in total payments Corrections made to hospitals from fiscal years 1998–99 through 2002–03, inpatient hospital payments represented $252.5 million (63 percent), whereas outpatient hospital payments represented $63.3 million (16 percent). Other payments to hospitals for services such as physician, laboratory, and ambulance services combined represented $85.3 million (21 percent). The following sections discuss the results of our review of Corrections' hospital payments for inpatient and outpatient services in the aggregate.

More-Expensive Hospital Services Drove Higher Inpatient Payments, and a Greater Number of Hospital Visits Was an Added Factor in Higher Outpatient Payments

Our analysis of Corrections' payment data showed that more-expensive hospital admittances were the predominant reason for the increase in hospital payments associated with inpatient services, whereas increases in both the price per visit and the number of visits contributed almost equally to increasing payments for hospital outpatient services. We conducted an analysis to determine the extent to which the increase in hospital payments from fiscal years 1998–99 through 2002–03 was due to an increase in the amount paid per hospital inpatient admittance or outpatient visit versus an increase in the number of hospital inpatient admittances or outpatient visits. The more-expensive hospital admittances and increased payment per outpatient visit could have been caused by either an increased price paid for similar procedures or more complex and costly procedures being performed. As we discuss in later sections, although institutions provided some analysis indicating that they paid significantly more for similar services at some hospitals, neither Corrections nor we could determine if Corrections was paying for procedures that were more complex because it did not enter in its computer database complete medical procedures data associated with the payments it made to hospitals. The results of our analysis for inpatient and outpatient hospital payments are presented in Tables 2 and 3.[5]

The more-expensive hospital admittances and outpatient visits could have been caused by either an increased price paid for similar procedures or more complex and costly procedures being performed.

As shown in Table 2 on the following page, Corrections' payments to hospitals for inpatient services increased by $38.4 million (more than 114 percent) from fiscal years 1998–99 through 2002–03. Most of this increase was associated with a higher average

[5] See Appendix B for a discussion of the methodology for our price-volume analysis.

payment per admittance. Specifically, approximately $27.3 million (71 percent) was associated with an increase in the average payment per admittance, whereas $11.1 million (29 percent) was associated with an increase in the number of admittances to hospitals.

TABLE 2

More-Expensive Hospital Admittances Were the Main Reason for the California Department of Corrections' Increasing Inpatient Hospital Payments (Dollars in Millions)

	Fiscal Year 1998–99	Fiscal Year 2002–03	Increase	Percentage Increase
Total number of inpatient admittances	4,044	5,362	1,318	32.6%
Total inpatient hospital payments*	$33.5	$71.9	$38.4	114.6%
Increase attributable to higher payments per admittance†			$27.3	71.1%
Increase attributable to greater number of admittances†			$11.1	28.9%

Source: California Department of Corrections' (Corrections) health care cost and utilization program database.

* The total inpatient payments do not agree with the total payments presented in Appendix A by approximately $160,000 because we excluded from our price-volume analysis those payment records for which Corrections did not enter a community hospital inpatient admission number. In addition, the fiscal year 1998–99 inpatient payment amount does not agree with Table B.1 in Appendix B due to rounding.

† See Appendix B for a discussion of the methodology for our price-volume analysis and our price-volume analysis for each correctional institution. We performed the analysis for each of the correctional institutions and summed the results for this aggregate analysis.

Similarly, Table 3 shows that outpatient hospital payments increased by $12.7 million (more than 181 percent) from fiscal years 1998–99 through 2002–03. However, unlike the inpatient hospital payments, the reasons for this increase are closely split between increases in the average payment per outpatient hospital visit and increases in the number of visits. Specifically, approximately $6.9 million of the increase (54 percent) was associated with an increase in the average payment per outpatient hospital visit, whereas $5.8 million (46 percent) was associated with an increase in the number of outpatient hospital visits. More striking is the fact that outpatient hospital visits nearly doubled from 7,547 visits in fiscal year 1998–99 to 14,923 visits in fiscal year 2002–03, even though Corrections' inmate population remained relatively constant during this period. This doubling of outpatient hospital visits would also have a significant effect on Corrections' cost for correctional officers because each hospital visit would require medical transportation guarding costs, and a previous audit found that these guarding costs were frequently paid at overtime pay rates.

TABLE 3

Increases in the Payment Per Visit and the Number of Visits Caused the Growth in the California Department of Corrections' Outpatient Hospital Payments (Dollars in Millions)

	Fiscal Year 1998–99	Fiscal Year 2002–03	Increase	Percentage Increase
Total number of outpatient visits	7,547	14,923	7,376	97.7%
Total outpatient hospital payments*	$7.0	$19.7	$12.7	181.4%
Increase attributable to higher payments per visit†			$6.9	54.3%
Increase attributable to greater number of visits†			$5.8	45.7%

Source: California Department of Corrections' (Corrections) health care cost and utilization program database.

* The total outpatient payments do not agree with the total payments presented in Appendix A by approximately $70,000 because we excluded from our price-volume analysis those payment records for which Corrections did not enter a community hospital outpatient number. In addition, the fiscal year 1998–99 outpatient payment amount does not agree with Table B.2 in Appendix B due to rounding.

† See Appendix B for a discussion of the methodology for our price-volume analysis and our price-volume analysis for each correctional institution. We performed the analysis for each of the correctional institutions and summed the results for this aggregate analysis.

Corrections Did Not Have Detailed Analysis to Explain the Reasons Behind the Overall Increase in Its Hospital Payments

In fiscal year 1990–91, Corrections implemented its health care cost and utilization program (HCCUP) to develop a statewide system for collecting and reporting inmate health care data. In its mission statement, HCCUP expresses its intention to capture costs and utilization data for use in day-to-day health care management and planning (see the text box). According to its fiscal year 1999–2000 procedures guide, which Corrections' Health Care Services Division (HCSD) provided as its current guide, the systems HCCUP maintains collect detailed health care costs, diagnosis, medical procedures, and other utilization management data. The guide indicates that the data is used to determine such things as the average cost of medical services per inmate, average cost per medical procedure, and average inpatient length of stay. Further, the guide states that the data is used for cost comparisons, trends, contract expenditures, and other health care activities. The guide goes on to define three key words that are part of the HCCUP mission statement:

Mission Statement of Corrections' Health Care Cost and Utilization Program (HCCUP)

HCCUP, a team of professionals, provides timely and accurate collection, analysis and reporting of health care service information, and is an integral part of the Health Care Services Division's efforts to achieve the goal of providing cost-effective quality health care to inmates on behalf of the citizens of California.

Source: HCCUP mission statement prepared in 1997.

Accurate

- Perform activities according to established procedures.
- Perform quality assurance, including database reconciliation, to ensure information is valid and complete.
- Identify errors, follow up with institution staff to correct errors, and revise data files to reflect corrected information.
- Ensure that invoices are processed for valid services, consistent with contract provisions, adjusted for discounts, and coded with appropriate account codes.

Analysis—The process by which raw data is combined, studied, and synthesized to provide:

- Insights into the interrelationships of the data.
- New understandings of the meaning of the data, including cause and effect, for the purpose of making projections as to its meaning and future impact.

Cost-effective quality health care—medical services provided to inmates:

- At the lowest possible costs.
- In the most efficient manner possible.
- Consistent with sound medical practices and "community standards of care."

If the HCCUP mission had been accomplished by ensuring all necessary data elements were accurately entered and relevant analysis of the available data had been performed, Corrections should have been able to determine if it was providing cost-effective quality health care, identify the causes of the increase in its payments to hospitals, and implement corrective action to limit the upward trend.

Although HCSD agreed that growth in hospital payments occurred, it did not explain with supporting analysis the reasons behind the dramatic overall increase in its payments to hospitals. When asked for its perspective on the causes of rising payments, HCSD cited several factors, including renewed

hospital contracts with higher payment rates, an aging inmate population, and litigation mandating increased medical care to inmates. However, HCSD did not demonstrate how each of these factors specifically contributed to the overall growth in hospital payments and by how much. According to HCSD:

> The HCSD does not currently have a comprehensive model that would include all conceivable and testable influences on medical expenditures to determine the factors that have contributed to the growth. A good model requires resources to develop, as it is the end result of a winnowing process. With the anticipated additional resources noted in the May revise, the HCSD [will] begin development of a comprehensive model that includes all conceivable, testable influences on medical expenditures. Then, using factor analytic techniques to reduce the number of variables and to detect structure in the relationships between variables, i.e., to classify variables, a final simple predictive model can be generated. This technique tests the components of the initial comprehensive model by creating and testing sub-models. From these candidate sub-models, a single simple sub-model that provides the "best" explanation is selected. This simple model is easier to put to test again in replication and cross-validation studies and is less costly to implement in predicting and controlling the outcome in the future. [Corrections] will continue to pursue a model in an effort to better analyze the health care cost and utilization data.

With the model this statement describes, potentially, Corrections could generate an abundance of interesting data, but that does not result in the identification of cost drivers that would allow Corrections to implement cost containment measures. The best test of whether Corrections' proposed comprehensive and complex model achieves its objective is if the model identified quantifiable cost savings. For instance, as discussed later, one institution simply compared prices it paid under an existing contract to what it would have paid under a prior contract and revealed that the new contract payment terms resulted in its costs rising from more than $355,000 to nearly $1.1 million related to the services shown on nine of its inpatient hospital invoices.

The best test of whether Corrections' proposed comprehensive and complex model achieves its objective is if the model identifies quantifiable cost savings.

When we asked HCSD how it uses the available data in its HCCUP database to monitor and control the upward trend in hospital payments, HCSD indicated that it prepares and makes available to management an annual report of health care cost statistics. We subsequently reviewed its latest available annual report and found that although HCSD had compiled systemwide statistics on health care costs that compared current-year results with those of the prior year, as of May 13, 2004, it was only able to provide the annual report for fiscal year 2001–02. HCSD told us the following:

> The last Annual Health Care Cost Report was completed for FY 2001/02. This standardized annual report provided bed utilization data for both community hospital and institution medical and mental health beds. In addition, the report included diagnoses and procedural data as well as costs associated with community hospital utilization. While this report does not provide the type of comprehensive analysis described [in the previous quotation] to determine reasons for cost increases, it is what the HCCUP was staffed to provide. Unfortunately, this same report was not completed for FY 2002/03 due to significant staffing shortages as a result of vacancies and workers' compensation cases within [the] program. In addition, since FY 1997/98 the workload for this program has increased dramatically . . . The impact on the HCCUP staff has been exponential, . . . with no increase in staff. In order to keep up with the data collection function, priorities were assessed and resources were directed to the most critical needs, which included the processing of invoices in the field. As a result, the annual report was not completed. Recognizing the significant workload and the critical nature of the work performed by the HCCUP analysts, the administration has requested an additional 24 positions in the May Revise be added to this unit effective July 1, 2004, to provide the resources necessary to input all critical data and provide the resources necessary to provide the required analysis.

HCSD's annual report for fiscal year 2001–02 provides no indication to Corrections' management that a problem existed in the rates it was paying for inpatient hospital facility charges.

However, HCSD's annual report for fiscal year 2001–02 provides no indication to Corrections' management that a problem existed in the rates it was paying for inpatient hospital facility charges. Instead, it concludes, "Annual community healthcare utilization (using the [average length of stay], total [length of stay] and total discharges as indicators) was, overall, less

than utilization in the 'free world'. This in spite of significant increases in: [Corrections] community [hospital] inpatient cases, and contract medical costs." The annual report supports its conclusion with tables showing that Corrections' costs per inmate for inpatient hospital care were half that of the national average and that its admittances and lengths of stays were approximately one-third the national average. In addition, the report compared the data in Corrections' tables with state data and various other statistics. However, the report did not indicate whether it considered the existence and use of various inpatient beds at its institutions or whether it considered other factors that may affect the comparability of Corrections' data to the national averages.

According to its fiscal year 2001–02 annual report, HCSD did not know the medical procedure codes for more than 61 percent of its hospital inpatient cases because it did not enter that data in its HCCUP database.

Nevertheless, in reporting the results of Corrections' health care services program, HCSD's fiscal year 2001–02 annual report also presented statewide data that showed it calculated the cost per case by International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnosis code for 98.9 percent of its 6,397 cases, but calculated the cost per case by ICD-9-CM procedure code for only 38.5 percent of its cases. In other words, according to its annual report, HCSD did not know the procedure codes for 3,936 (61.5 percent) of its 6,397 cases because it did not enter that data in its HCCUP database. Furthermore, HCSD prepared a year-end systemwide budget report for fiscal year 2002–03 displaying monthly projections of annual health care costs. The report revealed the dramatically increasing trend in overall health care costs from fiscal years 1999–2000 through 2002–03. However, it only displayed the increasing trend for fiscal year 2002–03 up to the month of November 2002. Moreover, HCSD did not perform and provide an accompanying analysis to explain the reasons for the trends in increasing health care costs evident in its systemwide data.

We specifically asked HCSD for its perspective on the reasons for increases in inpatient hospital payments that became more pronounced in fiscal year 2000–01. HCSD attributed the fiscal year 2000–01 growth in inpatient hospital payments to an increase in the number of days that inmates stayed in hospitals (census days), but it did not explain the reasons why the number of census days increased dramatically in that fiscal year. In fact, according to HCSD data, average census days per admittance increased from 4.6 days in fiscal year 1998–99 to 5.2 days in fiscal year 2000–01 and remained relatively steady for the next two fiscal years.

According to HCSD, although it is doubtful that any single factor can account for the entire increase, its high-level analyses determined that a small number of outlier cases from its male inmate population significantly impacted the annual average length of stay. However, even after we excluded these outlier cases, as well as female cases, from the analysis for its male inmate population, HCSD's own data shows that the annual average length of stay jumped from 3.9 days in fiscal year 1998–99 to 4.3 days in fiscal year 2000–01 and increased to 4.5 days in fiscal year 2002–03. Moreover, HCSD did not provide any analysis to explain whether the increase in average census days in fiscal year 2000–01 was due to a suddenly sicker inmate population that required longer hospital stays or to other factors. HCSD acknowledged that it lacked the clinical information needed to assess whether inmates were sicker and required longer hospitalization or if some other factor was causing the longer hospital stays and increasing hospital payments. According to HCSD, it developed a database that will capture that clinical health care data. Specifically, HCSD said the following:

> The lack of a single repository of clinical information led to the development of the recently implemented Utilization Management database that will collect detailed clinical information. This system was designed, in large part, to collect the clinical information that, when combined with the fiscal and administrative data collected by HCCUP, will enable the HCSD to perform the type of research and analysis to identify clinical and cost drivers. However, due to limited resources, the Utilization Management program cannot gather and enter this data for prior fiscal years.

Although HCSD is developing a database that will capture clinical health data, it would continue to depend on entering the same medical procedure codes that it did not enter into its HCCUP database.

However, Corrections' new database still requires staff to enter the same procedure codes that have not been entered into its HCCUP database. The documents Corrections gave us from its new utilization management database indicate that although the database is set up to provide some additional utilization management information, such as which nurse is approving procedures, and may help identify inconsistency among nurse approvals, Corrections also needs to consistently enter the same procedure codes that it did not always enter in its HCCUP database.

As we discussed earlier, HCSD indicated in its fiscal year 2001–02 annual report that it did not know the procedure codes for 3,936 (61.5 percent) of its 6,397 cases because it did not enter that data in its HCCUP database. Moreover, although both the new utilization management database and the HCCUP database

Medical Coding Systems

- **ICD-9-CM codes:** International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) is the official system of assigning codes to diagnoses and procedures associated with hospital utilization. Medical staff uses the information that physicians include in the inpatient and outpatient medical records to classify and assign ICD-9-CM diagnosis and procedure codes.
- **DRG codes:** A diagnosis related group (DRG) code classifies an inpatient hospital stay based on groupings of patient diagnoses and the medical procedures performed. DRGs are based on ICD-9-CM diagnosis and procedure codes and on patient age, sex, length of stay, and other factors. Medicare pays for inpatient hospital stays based on DRG weights and other factors specific to the hospital. DRG weights are determined according to the intensity of the resources, on average, that are needed to treat a particular kind of case. The higher the DRG weight, the greater the reimbursement.
- **CPT codes:** The Current Procedure Terminology (CPT) coding system was developed to assist with accurate reporting of procedures and services. Hospitals use CPT codes for reporting certain outpatient procedures, and are clustered with other service or procedure codes to determine an ambulatory payment classification.
- **APC:** Ambulatory payment classifications (APCs) group together hospital outpatient services, supplies, drugs, and devices that are used in particular procedures, and encompass services that are clinically similar and require similar resources. Each APC is assigned a relative payment weight, based on the median costs of the services within the APC. Medicare pays hospitals for outpatient services based on APC weights and other factors specific to the hospital. The higher the APC weight, the greater the reimbursement.

Sources: United States Department of Health and Human Services; American Medical Association.

use Microsoft Access database software, the two systems are not linked. Therefore, Corrections cannot use the new utilization management database for analysis requiring both medical and cost data. Further, such analysis requires Corrections to establish a process to reconcile the procedures it paid, as recorded in the HCCUP database, with the procedures performed, as reflected in the utilization management database. Had Corrections entered complete data about the procedures it paid for in its current HCCUP database and had it analyzed this data, Corrections could have identified the extent to which it was paying more for the same medical procedures than in earlier years and the extent to which case complexity was increasing.

Medical codes are used to facilitate payment of health care services, to evaluate utilization patterns, and to study the appropriateness of health care costs. Additionally, this coding must be performed correctly and consistently to produce meaningful information to aid in the planning for health care needs. Our review of the information HCSD collects in its HCCUP database revealed that, although the database has the capability to capture some clinical information Corrections needs to make its assessment, such as medical diagnosis and procedure codes, many of the records in the HCCUP database are incomplete. Our review of the database for fiscal year 2002–03 showed that although 5,773 of the 5,779 inpatient hospital payment records in the database included ICD-9-CM diagnosis codes, 3,864 included ICD-9-CM procedure codes and only 482 included diagnosis related group (DRG) codes (see the text box for explanations of medical coding systems). For the 15,361 outpatient hospital payment records in the database, 15,325 had ICD-9-CM diagnosis codes but only 3,403 had ICD-9-CM procedure codes and only 558 included Current Procedure Terminology (CPT) codes. Because the most complete clinical information available in the HCCUP database is primarily limited to diagnosis codes, the available data do not allow Corrections to identify the procedures it is paying for when attempting to analyze the clinical reasons associated with Corrections' increasing hospital payments. HCSD told us the following about the HCCUP database:

HCSD stated that there are occasions or circumstances when medical services would not require a medical code to be entered onto the invoices by hospitals.

The HCCUP database was designed to collect and track contract medical expenditure data that is extracted from the medical invoices. As the program's data collection process has evolved, and as the need for further information is assessed, new fields are added to the database in order to collect additional information. However, there are occasions or circumstances when the service would not require [that] a code be entered onto the invoices, as noted below.

Missing inpatient ICD-9[-CM] diagnosis codes

The HCCUP database does have validation reports that are run monthly to capture admissions with missing diagnoses.

Missing ICD-9-CM procedure codes

Not all inpatient admissions include any invasive procedures that would require an ICD-9-CM procedure code to be coded and placed on the invoice. Therefore, the field will be blank.

Missing DRG codes

The field to capture DRGs was added to the HCCUP database in order to track the invoices that were paid based on DRG case rate. The [hospital invoice] does not have a designated field for entry of a DRG. The HCCUP only captures DRGs for those contracts that provide for a reimbursement based on DRG case rates.

Missing CPT or ICD-9-CM procedures codes for outpatients

Not all outpatient procedures performed at the hospitals are coded to ICD-9-CM procedure codes and CPT codes. In the case of an outpatient service such as [an] MRI, the hospital will only use a CPT code for the technical (hospital) portion but would not code it with an ICD-9-CM procedure code. In the case of an emergency room visit, the service may include an EKG, an x-ray or some lab work, which [is] not normally coded by ICD-9-CM for those procedures. The hospital may or may not list the CPT code for them. Since minor procedures such as EKGs and x-rays are routine procedures, [they] would not be something that would

necessarily be entered into the database by HCCUP, unless the reason the patient was sent to the hospital was to receive those procedures specifically.

The HCSD recognizes the importance of data entry. When the additional resources requested via the May Revise are received, a quality control process will be implemented to ensure data integrity.

Although Corrections may not have required hospitals to provide procedure data on invoices, the absence of the data from its HCCUP database limits the analysis it can perform.

It is unclear whether the reasons HCSD gave us explain why it entered the ICD-9-CM procedure codes for only 38.5 percent of the 6,397 cases it presented in its fiscal year 2001–02 annual report. Although Corrections may not have required hospitals to provide data such as procedure codes on invoices, the absence of the data from its database limits the analysis it can perform. Contrary to Corrections' assertion, the HCCUP database system was designed to collect and track not only medical expenditure data but also utilization data from invoices. Both types of data are needed to achieve the stated goal of providing cost-effective quality health care to inmates.

As discussed in a previous section, according to its fiscal year 1999–2000 procedure guide, the systems HCCUP maintains collect detailed health care cost, diagnosis, medical procedure, and other utilization data. Although not all types of codes may need to be entered in all cases, if Corrections does not enter into its database system the codes of procedures for which it is paying, it is missing basic information needed to analyze both cost and utilization. Moreover, Corrections' fiscal year 2001–02 annual report, which provided some cost information by medical procedure category for the hospital admittances that included procedure codes, also reported on the amount spent for diagnosis and noninvasive procedures. Therefore, if HCCUP analysts had entered complete codes for all types of procedures into its HCCUP database, Corrections would have known how much it was paying for diagnosis and noninvasive procedures, as well as other procedures.

Similarly, although we presented HCSD with the results of our price-volume analysis, it provided no analysis explaining why an increase in the average payment per inpatient admittance was driving the growth in inpatient hospital payments. Nor did HCSD provide any formal analysis explaining why increases in both the average payment per outpatient visit and the number of outpatient visits were driving the growth in outpatient hospital payments. HCSD stated the following:

> The HCSD agrees with the statement insofar as there is no formal analysis explaining the increases. However, [Corrections] is aware of a number of factors, which may have contributed to this situation. These include differences in the number and types of diseases treated; advances in medical care resulting in changes in the diagnosing and treatment of disease; better and earlier identification of disease resulting in a greater number of referrals; changes in the amount hospitals bill for services, etc. The additional staffing resources requested via the May Revise will allow the HCSD to perform price/volume analyses in the future.

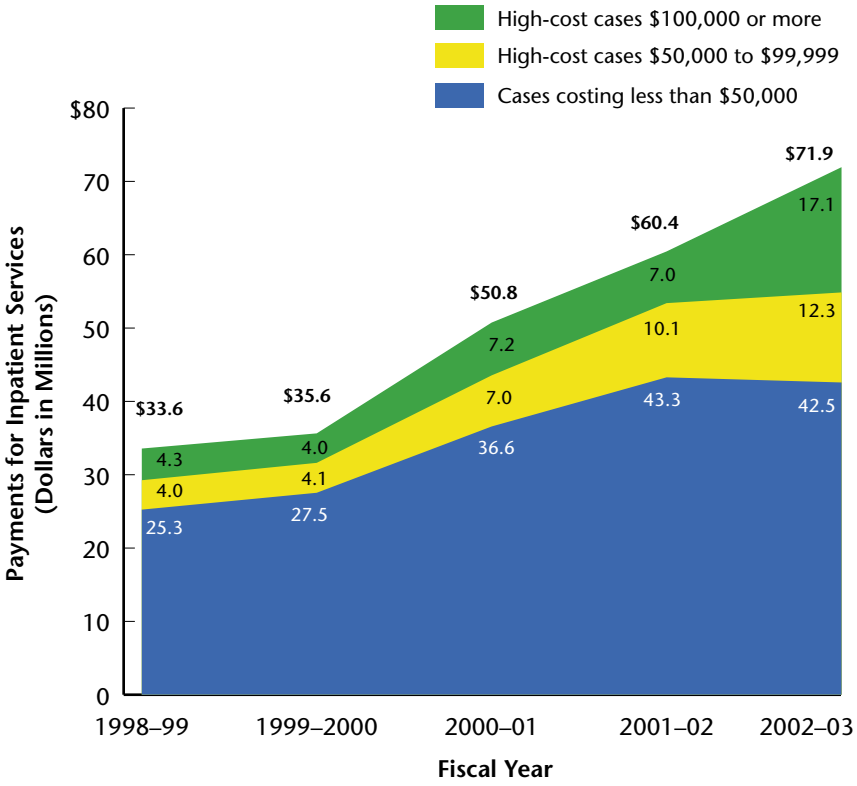
More High-Cost Cases Account for More Inpatient Hospital Payments

A closer review of Corrections' inpatient hospital payments revealed that Corrections spent more on high-cost inpatient hospital services in fiscal year 2002–03 than it did in fiscal year 1998–99. The benchmark Corrections has set for high-cost cases is $50,000 in payments for the hospital services associated with one continuous hospital stay. Using this benchmark and Corrections' hospital payment data, we distinguished inpatient hospital payments for high-cost cases from payments for cases falling below the $50,000 benchmark. As Figure 4 shows, Corrections paid $42.5 million to inpatient hospitals for cases that totaled less than $50,000 per case in fiscal year 2002–03 compared with $25.3 million in fiscal year 1998–99, a growth of 68 percent. On the other hand, Corrections paid $29.4 million to hospitals for high-cost inpatient hospital services in fiscal year 2002–03 compared with $8.3 million in fiscal year 1998–99, a growth of 254 percent. Overall, high-cost inpatient hospital payments comprised nearly 41 percent of total inpatient hospital payments in fiscal year 2002–03 compared with nearly 25 percent in fiscal year 1998–99. In other words, Corrections paid $50,000 or more per case for inpatient hospital services nearly 41 percent of the time in fiscal year 2002–03 compared with nearly 25 percent of the time in fiscal year 1998–99. Moreover, $17.1 million (58 percent) of the $29.4 million in high-cost inpatient hospital payments for fiscal year 2002–03 involved cases in which Corrections paid $100,000 or more per case.

Corrections paid $29.4 million to hospitals for high-cost inpatient hospital services in fiscal year 2002–03 compared with $8.3 million in fiscal year 1998–99, a growth of 254 percent.

FIGURE 4

High-Cost Hospital Inpatient Cases Drove Up the California Department of Corrections' Hospital Payments From Fiscal Years 1998–99 Through 2002–03

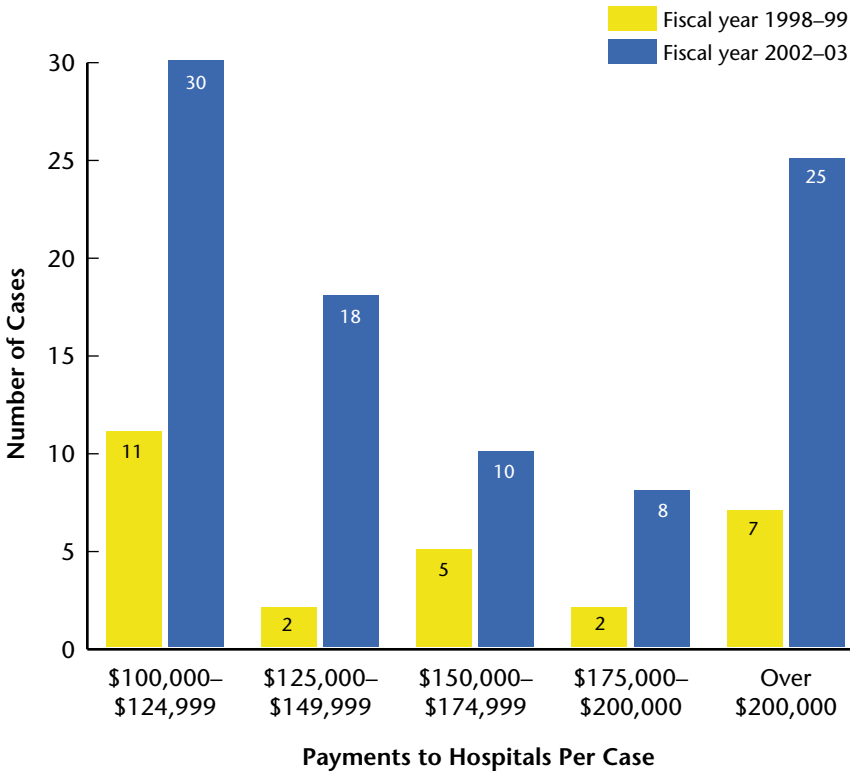


Source: California Department of Corrections' health care cost and utilization program database.

Additional analysis of these high-cost cases showed that Corrections experienced more cases with at least $100,000 in inpatient hospital services in fiscal year 2002–03 than it did in fiscal year 1998–99. Using Corrections' payment data, we identified cases for which Corrections paid $100,000 or more in inpatient hospital services in fiscal years 1998–99 and 2002–03. As shown in Figure 5 on the following page, Corrections had 91 cases with hospital payments exceeding $100,000 in fiscal year 2002–03 compared with only 27 cases in fiscal year 1998–99. Figure 5 also shows that of the 91 cases in fiscal year 2002–03, 25 cases had inpatient hospital payments that exceeded $200,000 each.

FIGURE 5

The California Department of Corrections Had More Cases With Inpatient Hospital Stays Costing at Least $100,000 Each in Fiscal Year 2002–03 Than in Fiscal Year 1998–99



Source: California Department of Corrections' health care cost and utilization program database.

When we asked HCSD whether it had performed any analysis to determine the extent to which high-cost inpatient cases were causing an increase in inpatient hospital payments, it stated that a HCCUP manager had done so while preparing for the midyear fiscal review process for fiscal year 2002–03. HCSD provided the following explanation:

> At that time, it appeared as [though] the number of high costs cases were increasing at an aggressive rate, and as such could be propelling the growth in total contract medical expenditures (CME). However, at that time the unchanging dollar threshold used to identify high-cost cases was questioned. . . .

> When the unit of analysis is switched from number of cases to expenditure, high-cost case expenditures also prove a poor predictor of CME. . . . This suggest[s] a third, related variable, such as an increase in total number of inpatient cases, or an unrelated variable, such as the growth in registry staff or hospital reimbursement rate, may be better candidates as the force behind the notable increase in CME. This analysis was updated and re-examined as a result of this audit response and the findings remain unchanged.
>
> Despite a lack of effect due to high-cost cases, the HCSD considers all high-cost cases worthy of additional scrutiny, observation, and oversight. . . . The patients will be transferred to a preferred provider setting as soon as clinically possible to take advantage of lower rates and secure guarded space.

By adjusting its threshold for high-cost cases upward, HCSD may reduce the number of cases it should investigate, but it does not relieve itself from investigating the reasons why so many cases are exceeding its threshold.

HCSD told us it plans to adjust the high-cost threshold in correlation with the medical consumer price index effective July 2004. Although on the surface this adjustment might appear to have merit to account for increasing prices, the purpose for having such a threshold is to establish a standard by which it can measure its outcomes and investigate the reasons why these high-cost cases surpassed that standard. By adjusting its threshold or its standard upward, HCSD might reduce the number of cases it should investigate, but it does not mitigate HCSD's responsibility to thoroughly investigate factors causing the high number of cases exceeding the threshold. Further, by simply applying the medical consumer price index to its existing high-cost threshold, HCSD misses an opportunity to update its high-cost threshold based on criteria that consider relevant factors such as recent advancements in medical procedures, treatments, and technology, among others.

HCSD's response to our inquiries regarding high-cost inpatient cases indicates that HCSD apparently performed some analysis on cases that exceeded its high-cost case threshold. Although HCSD may have found better potential candidates—the increase in the total number of inpatient cases, the growth in registry staff, and a higher hospital reimbursement rate—for the forces driving its notable increase in expenditures, it apparently has not fully investigated these possible causes. However, the analysis HCSD did perform was consistent with ours. As noted earlier in the report, our analysis of the increase in Corrections' inpatient hospital payments from fiscal years 1998–99 to 2002–03 revealed

that approximately 71 percent of the increase is due to an increase in the average amount paid to hospitals per inpatient admittance versus 29 percent due to an increase in the number of admittances.

Four of the 25 inpatient hospital cases exceeding $200,000 per case cost Corrections more than $2.4 million in total.

Further, four of the 25 fiscal year 2002–03 cases exceeding $200,000 per case cost Corrections more than $2.4 million in total, with each case costing more than $450,000 and two cases exceeding $670,000 each. According to documents in Corrections' medical case files, one inmate, who incurred more than $670,000 in inpatient hospital services, was treated for diabetic complications. The inmate spent a total of 73 days in the hospital, mostly in the intensive care unit using a ventilator to help with breathing. A second inmate, who also incurred more than $670,000 in inpatient hospital services, was treated for chronic obstructive pulmonary disease and bowel obstruction. This inmate spent a total of 117 days in the hospital, staying at least part of the time in the intensive care unit using a ventilator to help with breathing. A third inmate, who incurred costs of more than $610,000 during a 13-day inpatient hospital stay, was treated for swelling of the neck that could have led to airway blockage if left untreated, according to the inmate's medical case file. While at the hospital, doctors found that this inmate also had a bleeding disorder. Records indicate that the inmate was admitted to the hospital's intensive care unit and maintained on a ventilator to help with breathing. The medical case file of the fourth inmate who incurred more than $450,000 in inpatient hospital services indicates that he was treated for an inflamed intestine. While at the hospital, the inmate pulled out his feeding and breathing tubes, experienced respiratory arrest, and needed a ventilator to help with breathing, according to medical case file documents. This inmate spent a total of 54 days in the hospital, mostly on a ventilator.

For all four cases in which hospital payments exceeded $450,000, Corrections provided us with concurrent review documents that utilization management staff used to track the inmates' progress during their hospital stays. However, the documents showed that the reviews were not conducted on a regular basis during the inmates' hospital stays and did not demonstrate how Corrections evaluated the level of care or medical services to determine the ongoing appropriateness of the medical procedures and to ensure the continued medical necessity of the hospitalization. When we brought these issues to HCSD's attention, we received the following response:

> HCSD recognized that standardizing the documentation of the concurrent reviews was needed. As part of the Quality Management System, HCSD conducted mandatory statewide videoconference training in December 2003 on Utilization Management (UM). The goal of the course was to provide information regarding effectively performing the UM duties, which includes the UM review process, focus and selected scope, UM reviewer responsibilities, UM review guideline criteria, standardized UM forms and UM reporting documents.
>
> Development of the UM database was the most important tool in establishing not only a central data collection component for UM, but it assisted in standardizing the review and documentation process. . . . The HCSD UM staff have begun monitoring and performing assessments of UM processes, including the expected Concurrent Review documentation within the UM database. Within the next six months, development of a quality control process will include monthly reviews of a sample of prospective and concurrent reviews performed by UM staff at each institution. In addition, the HCSD is obtaining the *InterQual Acute Care Criteria*, which will assist with standardizing the concurrent and retrospective review processes.

Further, when asked why it could not treat these inmates at its own hospitals, Corrections responded that its hospitals were not equipped to handle the medical circumstances of these four inmates. Specifically, Corrections stated that its hospitals do not provide ventilator services. HCSD elaborated as follows:

When asked why it could not treat these inmates at its own hospitals, Corrections responded that its hospitals do not provide ventilator services.

> HCSD has not conducted a formal cost benefit analysis for ventilator services. However, a review of the necessary components to meet regulatory and quality care requirements for ventilator patients within [Corrections] does not appear to be cost effective or prudent at this time. [Corrections] generally only has 0 [to] 3 ventilator patients statewide at any given time. . . . As such, the requirements of care, staffing, equipment, space, training, and physical plant modifications for the few patients that require this service makes this proposal not cost effective and not prudent from a medico-legal risk perspective.

More Expensive Outpatient Visits Account for Larger Outpatient Hospital Payments

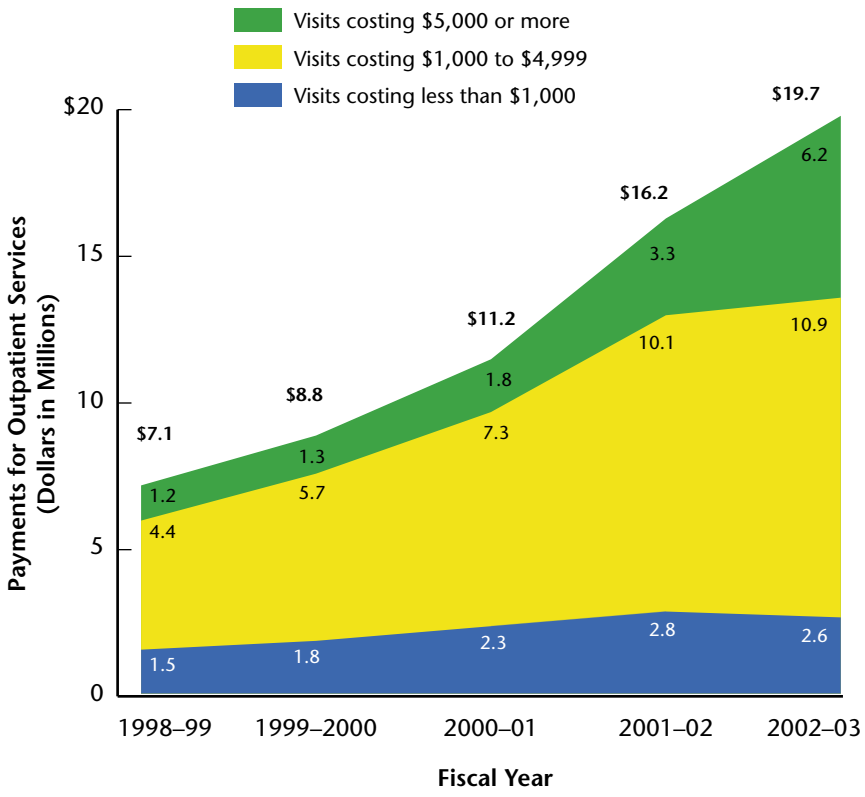
Similar to its inpatient hospital payments, Corrections also spent more on expensive outpatient hospital services in fiscal year 2002–03 than it did in fiscal year 1998–99. Because Corrections has no set amount that it uses to identify expensive outpatient hospital visits, we separated Corrections' fiscal years 1998–99 through 2002–03 outpatient payment data into visits costing less than $1,000 each, those costing $1,000 or more but less than $5,000 each, and those costing $5,000 or more each. As Figure 6 shows, for outpatient hospital visits costing less than $1,000 each, Corrections paid a total of $2.6 million in fiscal year 2002–03 compared with $1.5 million in fiscal year 1998–99, a growth of more than 73 percent. More significantly, for outpatient hospital visits costing $1,000 or more each, Corrections paid a total of $17.1 million in fiscal year 2002–03 compared with $5.6 million in fiscal year 1998–99, a growth of $11.5 million or more than 205 percent. Of the $17.1 million Corrections paid in fiscal year 2002–03, $6.2 million (more than 36 percent), was for visits in which Corrections paid $5,000 or more per outpatient hospital visit. Moreover, this $6.2 million represented a 244 percent growth from the $1.8 million Corrections paid in fiscal year 2000–01 for outpatient hospital visits that cost $5,000 or more each. In other words, in fiscal year 2002–03, Corrections paid more than three times the amount it paid two years earlier for outpatient hospital visits that cost $5,000 or more each.

In fiscal year 2002–03, Corrections paid more than three times the amount it paid two years earlier for outpatient hospital visits that cost $5,000 or more each.

Additional analysis of these outpatient hospital payments revealed that Corrections also experienced more cases of expensive outpatient hospital visits in fiscal year 2002–03 than in fiscal year 1998–99. Using Corrections' data on hospital outpatient payments, we identified cases in which Corrections paid at least $5,000 for one outpatient hospital visit in fiscal years 1998–99 and 2002–03. As shown in Figure 7 on page 38, Corrections had 706 outpatient hospital visits costing $5,000 or more per visit in fiscal year 2002–03 compared with 148 outpatient hospital visits in fiscal year 1998–99. Figure 7 also shows that of the 706 outpatient visits from fiscal year 2002–03, 159 outpatient visits exceeded $10,000 each.

FIGURE 6

From Fiscal Years 2000–01 Through 2002–03 the California Department of Corrections' Expenditures More Than Tripled for Outpatient Visits Costing $5,000 or More

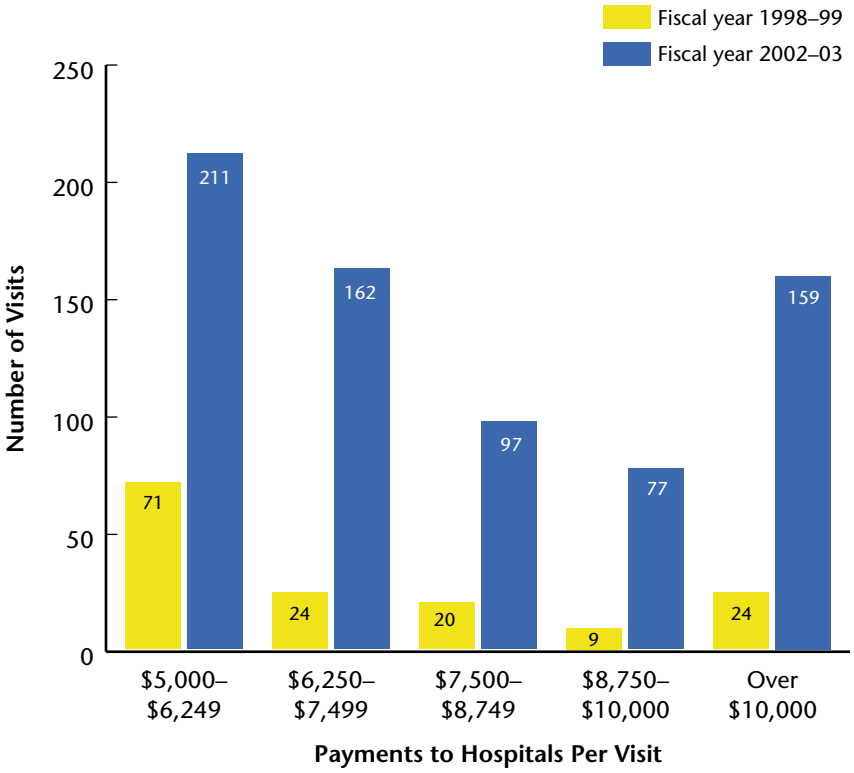


Source: California Department of Corrections' health care cost and utilization program database.

Moreover, for fiscal year 2002–03, 10 of the 159 hospital outpatient visits that cost Corrections more than $10,000 each exceeded $25,000 each, with three visits costing it more than $30,000 each. For these three visits, we asked Corrections to explain the inmates' medical conditions, the reasons they needed the medical attention, what hospital outpatient services were provided, the treatments they received, and how long they received treatments. Additionally, we asked Corrections to provide the documentation preauthorizing the hospital visits, including who preauthorized the hospital visit and any reviews it conducted of the appropriateness and medical necessity of the visits.

FIGURE 7

The California Department of Corrections Had Nearly Five Times as Many Cases of Expensive Outpatient Hospital Visits in Fiscal Year 2002–03 as in Fiscal Year 1998–99



Source: California Department of Corrections' health care cost and utilization program database.

For one outpatient visit that cost it nearly $48,000, Corrections explained that the inmate was diagnosed with a malformation of the brain vessels and needed the outpatient procedure to localize the malformations within the brain to prevent a potentially fatal aneurysm. However, as of June 30, 2004, Corrections could not locate the request for services or the utilization management worksheet forms outlined in its utilization management program guidelines; therefore, it could not demonstrate that a request was made and authorized for its most expensive outpatient visit in fiscal year 2002–03. For the other two outpatient visits, one totaling nearly $32,000 and the other more than $38,000, Corrections explained and provided hospital invoices showing that these visits were related to one inmate who received several weeks of radiation treatment and ultimately surgery for prostate cancer. In total, Corrections paid more than $90,000 for this

inmate's outpatient visits in fiscal year 2002–03. However, similar to the first case, as of June 30, 2004, Corrections could not demonstrate that requests were made and authorized for these expensive outpatient visits in fiscal year 2002–03 because it could not locate the requests for services nor the utilization management worksheet forms. Corrections explained that these forms are filed with the inmate's health records and follow the inmate. According to Corrections, because this second inmate was paroled, it could not obtain from the parole office the documents we requested from this inmate's health records within the two weeks it was given.

INSTITUTIONS CITED SEVERAL REASONS FOR SIGNIFICANT INCREASES IN INPATIENT HOSPITAL PAYMENTS

Rising average payments per hospital admittance were a major factor in the growth of inpatient hospital payments for many institutions, yet for some institutions, increasing numbers of hospital admittances were the major factor.

Although our analysis of aggregate inpatient hospital payments showed that an increase in the average payment per inpatient admittance appears to be the primary factor in the growth of inpatient hospital payments, our analysis of inpatient hospital payments made by individual correctional institutions revealed that the factors affecting each institution vary. Rising average payments per inpatient admittance were the major factor for many institutions, yet for some institutions, an increasing number of inpatient hospital admittances was the most significant factor driving increased hospital payments. Table B.1 in Appendix B presents the results of our analysis of inpatient hospital payments for each correctional institution.

We asked two correctional institutions to explain why an increase in their average payments per inpatient admittance appeared to be a reason behind the growth in their hospital payments, and why an increase in the number of admittances was also a factor for one of them. The California Substance Abuse Treatment Facility at Corcoran (Corcoran) informed us that a change in its mission and its becoming a designated dialysis facility caused its health care payments to increase. The R. J. Donovan Correctional Facility (Donovan) cited various reasons for the significant increase in its hospital inpatient costs that were significantly driven by increases in both the average amount paid for inpatient stays and the number of inpatient admittances.

According to the health care manager at Corcoran, the Substance Abuse Treatment Facility opened in August 1997. By fiscal year 1998–99, with an average daily population

of almost 6,000, the Corcoran facility still was not fully implemented. In fiscal year 2002–03, the average daily population was roughly 6,600. Although this is not a dramatic population increase, the health care manager stated that in the past two to three years, the population of elderly inmates suffering from long-term, chronic diseases increased, as did the population of inmates with disabilities such as mobility, visual, and hearing impairments, and that Corcoran had approximately 150 inmates confined to wheelchairs. Further, the health care manager explained that Corcoran had received increasingly severe and complex dialysis cases, and in fiscal year 2002–03, Corcoran became the central location for housing inmates requiring dialysis. Although these reasons may be contributing factors, Corcoran provided no analysis quantifying the extent that these factors drove higher average costs, such as an analysis of average medical costs with and without dialysis patients.

The Corcoran health care manager explained that using ICD-9-CM diagnosis codes for comparison is not an accurate method for determining the overall treatment inmates receive.

To assist with its analysis of increasing hospital costs, we provided the Corcoran health care manager with the ICD-9-CM diagnosis codes associated with its inpatient hospital payments. However, the Corcoran health care manager explained that using ICD-9-CM diagnosis codes for comparison is not an accurate method for determining the overall treatment inmates receive. A hospital reimbursement is not based on ICD-9-CM diagnosis codes but on the type of service the hospital provides and the length of time the patient stays in the hospital. The ICD-9-CM diagnosis codes only indicate why the inmate was seeking medical attention, have no bearing on cost, and often vary greatly with the codes used on discharge. In addition, the health care manager indicated that the ICD-9-CM diagnosis codes give no information on the length of the hospital stay, coexisting diseases or medical conditions, the complexity and severity of the case, and the overall treatment of the inmate.

The health care manager's comments about the limited use of ICD-9-CM diagnosis codes alone are correct. Neither Corrections nor we can perform adequate analysis using the data in its HCCUP database because institutions did not consistently enter the ICD-9-CM procedure codes or request and enter the DRG codes from the hospital invoices that would have allowed an analyst to determine the procedures that had been paid for without laboriously locating and reviewing invoices. For example, during fiscal year 1998–99, Corcoran entered the ICD-9-CM procedure codes for 101 of its 161 inpatient payment

records and the DRG codes for none. In fiscal year 2002–03, the numbers increased to 218 of 264 inpatient payment records for the ICD-9-CM procedure codes, but the number of DRG codes entered remained at zero.

Corcoran's analysis for 10 of its 20 fiscal year 2002–03 high-cost inpatient cases revealed that it paid more than four times what it would have paid using the earlier fiscal year 1998–99 contract payment terms.

Corcoran provided an analysis of the extent to which a renegotiated contract significantly increased the price it paid for inpatient hospital stays. We asked Corcoran to analyze its high-cost cases—those incurring $50,000 or more in inpatient payments—to a hospital it used.[6] In its analysis, Corcoran compared the payments made under the renegotiated contract with this hospital to the amounts it would have paid using the earlier contract payment terms. Corcoran's analysis of its four high-cost inpatient cases from fiscal year 2000–01 revealed that it paid nearly three times what it would have paid under the earlier fiscal year 1998–99 contract payment terms. Additionally, Corcoran's analysis for 10 of its 20 fiscal year 2002–03 high-cost cases revealed that it paid more than four times what it would have paid using the earlier contract payment terms. One of the 10 high-cost cases resulted in Corrections paying more than 34 times what it would have paid using the fiscal year 1998–99 contract payment terms. However, even after setting aside this large case from Corcoran's analysis, it still paid nearly three times what it would have paid using the earlier contract payment terms.

Our comparison of the payment terms of this hospital's contract for fiscal year 1998–99 with the terms of the fiscal year 2002–03 contract showed that the most significant difference was the addition of an inpatient stop-loss provision. This provision requires Corrections to pay a percentage of the hospital's total billed charges once these charges reach the contractual stop-loss threshold per inpatient discharge. According to the fiscal year 2002–03 contract payment terms, once this stop-loss threshold is met, the stated per diem, case rate, or add-on rates no longer apply.

At the second institution, Donovan, inpatient hospital payments increased from $1.8 million to $5.3 million between fiscal years 1998–99 and 2002–03, a 194 percent increase. Approximately $1.6 million of this increase was associated with an increase in the average amount paid per admittance, and approximately

[6] As we discuss in the Scope and Methodology section of the report, Corrections asserted the privilege contained in California Government Code, Section 6254.14, that permits it to protect from disclosure certain information associated with health care services contracts, including rates. Thus, we use generic names in lieu of actual hospital names in our report and do not disclose the generic hospital name in examples where we name specific institutions.

$1.9 million was associated with the significant increase in the number of admittances, from 197 in fiscal year 1998–99 to 403 in fiscal year 2002–03.

Donovan informed us that one factor affecting its average payment per inpatient hospital admittance also was a new contract with a hospital in fiscal year 2000–01. According to Donovan's health care manager, on July 1, 2000, it received a new contract for a hospital. The new contract includes inpatient per diem as well as stop-loss rates. The health care manager provided a comparison analysis of nine high-cost cases that occurred in fiscal year 2000–01, illustrating the difference in paid amounts between the old and new contracts. As shown in Table 4, the analysis revealed results similar to Corcoran: Under the new contract, Donovan paid almost three times what it would have paid under the terms of the prior contract. According to the health care manager, all cases exceeding $100,000 for any fiscal year after fiscal year 1998–99 would have been significantly less based on the previous contract payment rates. He further informed us that the charges included in the hospital's charge description master—an itemized list of prices for the services the hospital provides—also increased during the term of the new contract.

TABLE 4

An Analysis by the R. J. Donovan Correctional Facility Revealed Significantly Higher Costs for Inpatient Services Under Its New Hospital Contract Compared With Its Prior Contract

Fiscal Year 2000–01 High-Cost Case	Payment Under Fiscal Year 2000–01 Contract Terms	Payment Using Fiscal Year 1998–99 Contract Terms	Percentage of New Payment to Prior Payment	Payment Increase Due to New Contract Terms
1	$ 184,666	$ 72,956	253.1%	$111,710
2	269,052	107,463	250.4	161,589
3	82,878	26,701	310.4	56,177
4	89,809	34,091	263.4	55,718
5	60,925	15,754	386.7	45,171
6	134,271	39,358	341.2	94,913
7	117,554	32,460	362.2	85,094
8	59,094	18,170	325.2	40,924
9	57,073	8,242	692.5	48,831
Totals	**$1,055,322**	**$355,195**	**297.1%**	**$700,127**

Source: Health care manager at the R. J. Donovan Correctional Facility.

According to Department of Health Services' standards, Donovan's inpatient rooms were suitable for only one patient rather than two; therefore, Donovan reduced its inpatient capacity by almost one-half.

Additionally, Donovan's health care manager cited a few reasons why inmates stayed at off-site hospitals rather than at its 30-bed correctional treatment center. The health care manager said that during preparations for correctional treatment center licensure in 2000, Donovan discovered that according to Department of Health Services' standards, the facility's inpatient rooms were suitable for only one patient rather than two. As a result, Donovan reduced its inpatient capacity by almost one-half. Further, this reduction in the number of inpatient beds at Donovan was compounded by its role as a hub for mental health crisis beds. According to Donovan's health care manager, not only did its number of mental health crisis bed population increase from six to 15 from fiscal years 1998–99 through 2002–03, but also transfers of mental health crisis patients from other institutions to Donovan increased. As a result, Donovan had to occasionally transfer its medical patients to a community hospital to provide more beds for mental health crisis patients. Moreover, the health care manager told us that a full population of mental health crisis patients occasionally prevented Donovan from accepting into its correctional treatment center inmates who had been discharged from the hospital but still required admission to a correctional treatment center for convalescence.

Donovan's health care manager provided additional insights into both the payments and the number of inpatient stays. The health care manager stated that although Donovan's average daily population did not significantly change, an increase in the number of its inmates possessing more-complex medical and mental health problems led to an increase in hospitalizations. For example, according to the health care manager, from fiscal years 1998–99 through 2002–03, the average number of dialysis patients increased from five to 17 per month, and the number of mental health patients increased from 600 to 1,200. According to the Donovan health care manager, medical complications are common with dialysis patients. Although the correctional treatment center at Donovan is equipped to handle basic dialysis cases, inmates who experience complications must be sent to community hospitals for specialized treatment. Additionally, the increase in mental health patients has led to an increase in hospitalizations for seizure disorders and drug overdoses related to suicide attempts. Finally, the health care manager noted that the increased number of hospital admissions was in part caused by repeat admissions by inmates for the same medical problems. For example, he identified one instance of a patient with 12 admissions and two others with five admissions each.

We asked HCSD whether it had performed any analysis or studies that would explain the effects of new contract payment terms and fewer inpatient beds on hospital payments. HCSD told us the following:

> The HCSD has not performed, in the past, a detailed analysis of new contract payment terms on the cost of inpatient care. Such an analysis would be beneficial for future negotiation purposes. . . . [Corrections] plans to improve its negotiating practices, including standardizing rate review and approval that will include consideration of medical inflation cost-to-charge data, Medi-[C]al and Medicare rates, etc. In fact, the HCSD has recently completed a reorganization that has provided additional resources to the [Health Contracts Unit], thus allowing for improved analysis and negotiations. Furthermore, [Corrections] is seeking legislative relief to enhance its negotiating abilities.

HCSD stated that it has performed no analysis regarding the impact of increased occupancy of its internal beds on utilization of community hospital beds.

> The HCSD has collected data regarding occupancy rates for its internal bed utilization. To date, no analysis has been performed regarding the impact of increased occupancy of the [Corrections] beds on utilization of community hospital beds. . . . The percentage of occupancy is very high within our inpatient facilities. On a daily basis inmates are being transported to various [Corrections] licensed facilities to accommodate those patients who cannot be cared for in a community setting. The need for inpatient [Corrections] beds has been realized, and funding and construction of a 50-bed mental health crisis facility is under way. In addition, [Corrections] is contracting with the Department of Mental Health for 25 acute inpatient psychiatric beds at Atascadero State Hospital to provide crisis beds for the California Men's Colony, one of [Corrections] largest mental health facilities that currently has no licensed mental health beds on site. In June 2005 Delano II will open with 25 Correctional Treatment Center (CTC) beds, and the California Institution for Women will open their 20 bed CTC facility in the spring of 2005 as well. Additional [Corrections] mental health licensed beds are being considered in the future under the mental health facility study currently under way. It is expected that these new licensed beds will provide the necessary relief to allow the medical patients to be accommodated,

as appropriate, within the prison health care facilities in the future. The new UM database will be able to effectively identify aberrant days and the reason why these community hospital patients are not returned to the institution once discharged.

CERTAIN CONTRACT PROVISIONS RESULTED IN CORRECTIONS PAYING HIGHER AMOUNTS FOR INPATIENT HEALTH CARE

Our review of inpatient hospital payments for selected hospitals revealed that the terms of some contracts resulted in payments that were significantly higher than those made by Medicare for similar hospital services. This effect appeared most pronounced for hospitals whose contracts include stop-loss provisions. Stop-loss provisions are intended to protect hospitals from incurring financial losses for exceptional cases, when patients develop complications requiring unexpectedly long, expensive hospital stays. A stop-loss provision in a contract sets a dollar threshold for hospital charges per admittance. Typically, if the charges per admittance exceed the threshold, Corrections pays a percentage of the total charge, rather than a per diem or other rate. However, should hospital administrators inflate charges to take advantage of stop-loss provisions, Corrections could unknowingly pay higher amounts to hospitals than expected unless Corrections takes additional steps to monitor and investigate potentially inflated hospital charges. Among the contracts we reviewed that included stop-loss provisions, the threshold triggering the stop-loss provisions was based on a wide range of each hospital's billed charges, and the percentage to be paid under the stop-loss provisions varied, but was a percent of billed charges for the entire inpatient stay.[7]

If hospital administrators inflated charges to take advantage of stop-loss provisions, Corrections could unknowingly pay higher amounts to hospitals than expected.

As an alternative to the disadvantageous stop-loss arrangements, Corrections could apply hospital cost-to-charge ratios to hospital charges to estimate the actual costs for the services provided and then use these estimates to evaluate the reasonableness of hospital payments or as a starting point in negotiating future contract terms. For example, instead of paying a percentage of

[7] As we discuss in the Scope and Methodology section of the report, Corrections asserted the privilege contained in California Government Code, Section 6254.14, that permits it to protect from disclosure certain information associated with health care services contracts, including rates. Thus, we do not disclose the floor and ceiling of the various stop-loss provisions because Corrections asserts that disclosure of this information could impact its ability to negotiate future contracts with providers that may insist on like terms.

the hospital's entire billed charges for stop-loss cases, a better arrangement for Corrections would be to pay per diem up to the stop-loss threshold and then pay cost plus a percentage for the services beyond the stop-loss threshold. This is not necessarily the best or only arrangement for Corrections, but is presented as an example of a better stop-loss arrangement than the one Corrections currently uses.

Corrections' Stop-Loss Provisions, That Are Based on Hospital Charges, Result in Higher Payments to Hospitals

Our comparison of Corrections' inpatient hospital payments with the amount Medicare would pay for similar services revealed that, in general, Corrections' payments to hospitals that have stop-loss provisions in their contracts are higher than those to hospitals whose contracts do not include stop-loss provisions.

Recognizing that each medical case is unique and not directly comparable from hospital to hospital, we compared Corrections' payment for each inpatient invoice to what Medicare would have paid that hospital for a similar service.

We compared Corrections' payments to hospitals against a common base to account for the uniqueness of medical cases and the variability of hospital attributes. Specifically, we identified 15 hospitals that received at least $5 million in inpatient and outpatient payments based on payment data in Corrections' HCCUP database from fiscal years 1998–99 through 2002–03. Five of the 15 hospitals were hospitals run by the Tenet Healthcare Corporation (Tenet). Next, we stratified the inpatient invoices Corrections paid in fiscal year 2002–03 for each of the 15 hospitals. We then randomly selected 10 inpatient invoices to review from each hospital. However, recognizing that each medical case is unique and not directly comparable from hospital to hospital, we compared Corrections payment for each inpatient invoice to what Medicare would have paid each of the 15 hospitals for similar services.

The Medicare payment provided a common benchmark useful in comparing Corrections' hospital payments among the hospitals we reviewed. Medicare's payment calculations take into account variables specific to each hospital that can affect costs—for example, hospital location and the portion of hospital resources expended for teaching and to serve economically disadvantaged groups. The Medicare payment formula for inpatient services begins with a DRG code that categorizes patients into groups that are the same in terms of hospital resources used. Each DRG is assigned a weighting factor representing the average proportion of hospital resources typically used to treat a particular condition. Medicare uses DRGs, along with hospital-specific weights that account for cost differences associated with such factors as location, to arrive at

hospital-specific payments for services. Thus, because Medicare payments encapsulate the cost variability among hospitals and the uniqueness of a patient's medical condition, we used them to measure Corrections' payments to hospitals by calculating ratios of Corrections' hospital payments to Medicare payments and comparing the resulting ratios among the selected hospitals.

We calculated Medicare payments for each of the invoices using software obtained from the Centers for Medicare and Medicaid Services (CMS), the federal agency that administers the Medicare system. However, we adjusted the payment calculated by the CMS software to account for CMS's use of potentially outdated data in its calculation of outlier payments. Outlier payments provide additional Medicare compensation to hospitals for certain unusually costly cases. Under rules in place before October 2003, CMS used the historical relationship between a hospital's Medicare costs and its Medicare-billed charges to determine cost-to-charge ratios, which CMS used to calculate outlier payments. Because the information used in calculating cost-to-charge ratios was approximately two years old, some hospitals manipulated the outlier formula to increase their Medicare payments by aggressively increasing their billed charges. After discovering this flaw in its payment system, CMS changed its rule for outlier payment calculations in October 2003 to require more-current hospital cost and billing data.

To compensate for the potential flaw in the Medicare payments we used to compare against Corrections' payments, we obtained from CMS fiscal intermediaries—contractors that process and pay Medicare claims—updated cost-to-charge ratios based on hospital costs and billed charges from periods covering fiscal year 2002–03. To arrive at an updated Medicare payment, we used the updated cost-to-charge ratios to calculate any outlier payments due on the inpatient invoices in our sample and added this outlier payment to the standard Medicare payment for each invoice as calculated by CMS's Pricer software. To facilitate the hospital-to-hospital comparison, we divided Corrections' payments for the invoices we reviewed by our updated Medicare payments for the invoices and calculated a weighted average ratio for each hospital.

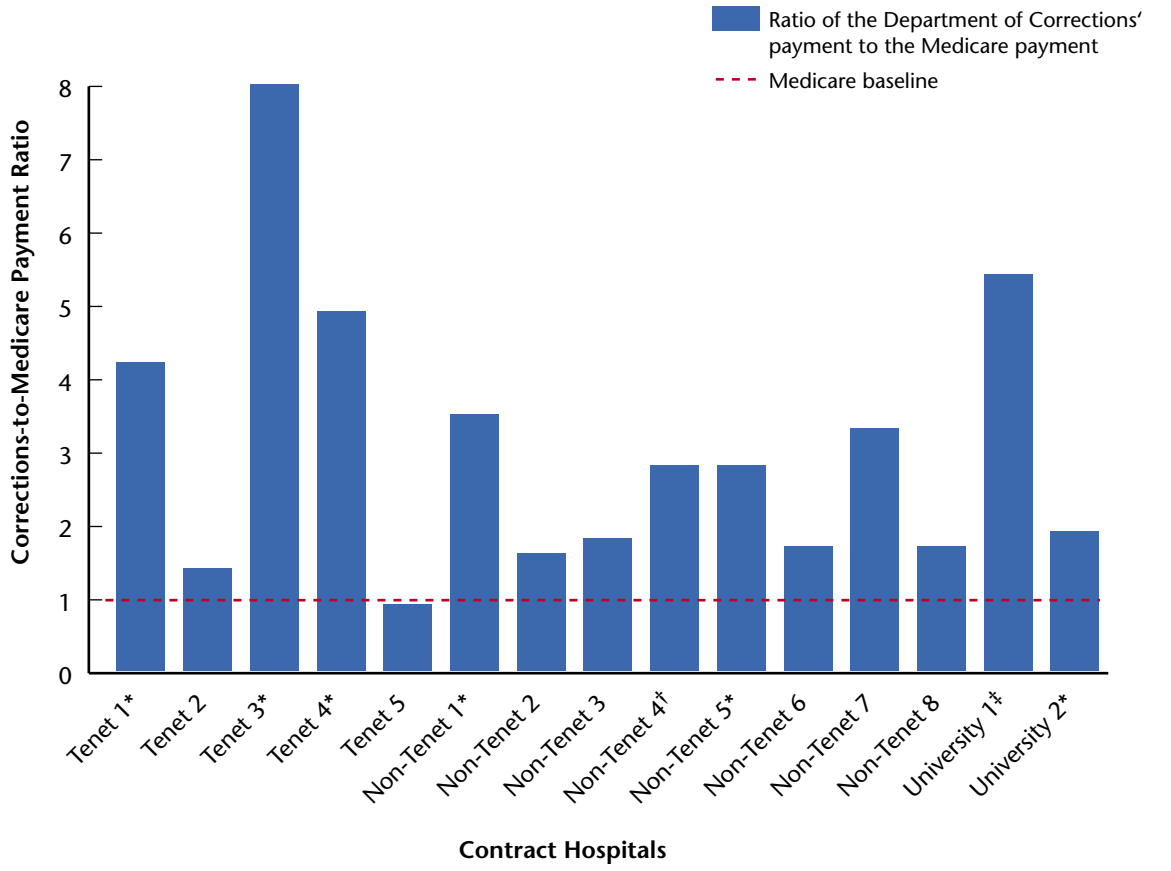
Corrections' payments to some hospitals we reviewed represented a significant premium over Medicare payments for the same services.

The resulting Corrections-to-Medicare payment ratios, presented in Figure 8 on the following page, indicate that Corrections' payments to some hospitals we reviewed represented a significant premium over Medicare payments for the same services. In Figure 8, the horizontal dashed line at 1.0 represents the Medicare payment baseline—that is, the ratio that would have resulted had Corrections

paid the same amount as Medicare. As the figure shows, eight of the 15 hospitals had ratios that were more than twice the Medicare baseline, indicating that Corrections' payment was more than twice what Medicare would have paid. Moreover, six hospitals, including three Tenet hospitals, had ratios that were more than three times the Medicare baseline. To examine the factors driving Corrections' payments to be multiples of what Medicare would have paid, we analyzed the payment terms in Corrections' contracts with the 15 hospitals we reviewed.

FIGURE 8

The California Department of Corrections' Payments to Hospitals With Stop-Loss Contract Provisions Generally Were Significantly Higher Than Updated Medicare Payments



Sources: Hospital invoices for care provided to the California Department of Corrections' (Corrections) inmates, Corrections' hospital contract rate sheets, and the Centers for Medicare and Medicaid Services' Pricer software and fiscal intermediaries.

Note: As we discuss in the Scope and Methodology section of the report, Corrections asserted the privilege contained in California Government Code, Section 6254.14, that permits it to protect from disclosure certain information associated with health care services contracts, including payment rates. Therefore, it requested that we use generic names instead of actual hospital names in our report.

* Hospitals with stop-loss contract provisions.

† Charges based on per diem or case rates.

‡ Per diem includes facility and physician services.

In our review, we found that hospital contracts that include stop-loss provisions, based on charges, generally resulted in higher Corrections-to-Medicare payment ratios. We found that Corrections uses a variety of contractual payment terms, ranging from per diem only to combinations of per diem, percentage-of-billing, and stop-loss provisions. Corrections' stop-loss provisions typically require it to pay a percentage of any total hospital charge that exceeds a contractual dollar threshold. Table 5 shows the variety of payment terms in the 15 hospital contracts we reviewed and shows that six include stop-loss provisions.

TABLE 5

The California Department of Corrections' Inpatient Hospital Contracts Include Various Payment Terms

Hospital	Per Diem or Case Rates	Percentage of Billing	Stop Loss	Calculated Corrections-to-Medicare Payment Ratio
Tenet 1	X		X	4.2
Tenet 2	X			1.4
Tenet 3	X		X	8.0
Tenet 4	X		X	4.9
Tenet 5	X			0.9
Non-Tenet 1	X		X	3.5
Non-Tenet 2	X			1.6
Non-Tenet 3	X			1.8
Non-Tenet 4	X	X		2.8
Non-Tenet 5	X		X	2.8
Non-Tenet 6	X			1.7
Non-Tenet 7		X		3.3
Non-Tenet 8		X		1.7
University 1	X	X*		5.4
University 2	X	X*	X	1.9

Source: California Department of Corrections' (Corrections) hospital contract rate sheets.

Note: As we discuss in the Scope and Methodology section of the report, Corrections asserted the privilege contained in California Government Code, Section 6254.14, that permits it to protect from disclosure certain information associated with health care services contracts, including payment rates. Therefore, it requested that we use generic names instead of actual hospital names in our report.

* Includes percentage-of-billing provisions for certain medical products.

A number of patterns emerged from our analysis of hospital contracts. First, as Figure 8 illustrates, hospital contracts that include stop-loss provisions generally resulted in higher payments compared with Medicare payments. Table 5 shows that of the six hospitals with ratios more than three times the

Medicare baseline, four hospitals—Tenet 1, Tenet 3, Tenet 4, and Non-Tenet 1—have contracts with stop-loss provisions, and one hospital, Non-Tenet 7, is paid a percentage of its billed charges. The sixth hospital, University 1, had a larger ratio, in part because it has a relatively large contractual per diem rate that includes fees for physicians and other professionals in addition to its facility charge. Second, hospitals with per diem rate structures and no stop-loss contract provisions—Tenet 2, Tenet 5, Non-Tenet 2, Non-Tenet 3, and Non-Tenet 6—had ratios closer to the Medicare baseline. Third, of the five Tenet hospitals in our sample, the three whose contracts include stop-loss provisions—Tenet 1, Tenet 3, and Tenet 4—had ratios significantly larger than those without stop-loss provisions—Tenet 2 and Tenet 5.

These results further corroborate those of our April 2004 report titled *California Department of Corrections: It Needs to Ensure That All Medical Service Contracts It Enters Are in the State's Best Interest and All Medical Claims It Pays Are Valid*, in which we reported that Corrections could obtain substantially better rates when paying a per diem rate than when paying a flat discount rate. These results also may point to a potential weakness in Corrections' stop-loss provisions: Unchecked, Corrections' stop-loss provisions, which serve purposes similar to CMS's outlier payments, are open to exploitation by hospitals that seek to increase their payments. In fact, as previously mentioned, CMS announced in 2003 that it was changing its method of calculating outlier payments after discovering the year before that a few hundred hospitals had manipulated Medicare's outlier formula to receive higher payments by aggressively increasing their charges. Hospitals investigated as part of the federal government probe into potentially inflated outlier payments included some Tenet hospitals. CMS estimated that hospitals' manipulation of the outlier formula have cost U.S. taxpayers $1 billion to $2 billion in overpayments annually since 1999.

Corrections could achieve significant savings if it were able to negotiate contracts without stop-loss provisions or base stop-loss payments on hospital costs rather than hospital charges.

Corrections could achieve significant savings if it were able to negotiate contracts without stop-loss provisions or base stop-loss payments on hospital costs rather than hospital charges. To provide a rough illustration of the potential savings that Corrections might achieve by changing the terms of its hospital contracts, we recalculated the payments that Corrections appeared to make under the stop-loss provisions included in contracts for hospitals we reviewed. In our recalculations, we identified those payments that appeared to be made using stop-loss provisions and separated those from the other payments (non-stop-loss payments). Using

the lengths of stays and payments associated with those non-stop-loss payments, we calculated an average daily payment rate. Finally, we multiplied the lengths of stays associated with the stop-loss payments by the average daily payment rate we calculated from the non-stop-loss payments.

It is important to recognize that although contract provisions are subject to negotiation, Corrections may not be able to negotiate hospital contracts without provisions to shield hospitals from exceptional cases with the potential for extraordinary financial losses, or Corrections may need to pay higher per diem rates. However, as an illustration of the maximum savings Corrections might have achieved had it been able to negotiate contracts without its typical stop-loss provisions for the hospitals we reviewed, Table 6 shows potential savings of up to $9.3 million (35.1 percent) in inpatient hospital payments in fiscal year 2002–03. This analysis illustrates how Corrections' stop-loss provisions not only protected the hospitals financially but also benefited most of the hospitals we reviewed whose contracts include these provisions.

TABLE 6

The California Department of Corrections Could Achieve Savings by Negotiating Hospital Contracts Without Stop-Loss Provisions for Inpatient Services in Fiscal Year 2002–03 (Dollars in Millions)

Hospital With Stop-Loss Contract Provisions	Total Inpatient Payment	Stop-Loss Payment	Stop-Loss Recalculated at Average Daily Amount Paid	Maximum Potential Savings*	Total Inpatient Payment After Maximum Savings	Percentage Difference in Total Payment With Maximum Savings
Tenet 1	$ 7.1	$ 3.3	$1.9	$1.4	$ 5.7	19.7%
Tenet 3	2.1	1.9	0.3	1.6	0.5	76.2
Tenet 4	1.8	1.2	0.2	1.0	0.8	55.6
Non-Tenet 1	12.4	6.5	1.9	4.6	7.8	37.1
Non-Tenet 5	2.0	1.1	0.4	0.7	1.3	35.0
University 2	1.1	0.5	0.5	—	1.1	0.0
Totals	**$26.5**	**$14.5**	**$5.2**	**$9.3**	**$17.2**	**35.1%**

Sources: California Department of Corrections' (Corrections) health care cost and utilization program database; Corrections' hospital contract rate sheets.

Note: As we discuss in the Scope and Methodology section of the report, Corrections asserted the privilege contained in California Government Code, Section 6254.14, that permits it to protect from disclosure certain information associated with health care services contracts, including payment rates. Therefore, it requested that we use generic names instead of actual hospital names in our report.

* These calculated savings are rough estimates based on payment data from Corrections' health care cost and utilization program database. Additionally, it is important to note that hospital contract payment provisions are subject to negotiation and that Corrections may not always be able to negotiate hospital contracts that would achieve similar savings.

Corrections' stop-loss payments accounted for over 55 percent of total payments to the Tenet 4 hospital and over 76 percent of total payments to the Tenet 3 hospital.

Our analysis further revealed that Corrections' proportion of stop-loss payments exceeded CMS's target for outlier payments. For many years, CMS has targeted 5.1 percent of total inpatient payments to be used to pay for outliers. In contrast, the additional inpatient payments—the potential savings calculated in the analysis illustrated in Table 6—made by Corrections in fiscal year 2002–03 under stop-loss provisions accounted for 55.6 percent of total payments to Tenet 4 and 76.2 percent of total payments to Tenet 3. Corrections had the following reaction to our analysis:

> . . . The stop-loss provisions [is] a form of mutual risk sharing. [Corrections] attempts to negotiate for per diem rates. Unfortunately some hospital providers refuse to contract without a stop-loss provision. [Corrections] is also planning to prepare a Request for Proposal to obtain a consultant with significant experience in negotiating contracts with hospitals and specialty providers to train and advise [Health Contracts Unit] negotiations staff. [Corrections] is continuing to explore and discuss negotiating options with the Department of Health Services and [the California Medical Assistance Commission].

Using Hospital Cost-to-Charge Ratios Could Help Corrections Evaluate Its Hospital Payments and Negotiate Future Contracts

The factors used to construct hospital cost-to-charge ratios make them a valuable tool for monitoring the reasonableness of payments to hospitals and negotiating contract rates with hospitals. A cost-to-charge ratio results from dividing total costs incurred by a hospital to deliver all medical services by the total amount it charged for all services over a given period. The distinction should be noted between charged amounts and amounts ultimately paid to hospitals for their services. In general, a hospital will charge all payers the same amount for a given service or product, but the amount a hospital actually receives in payment from each payer for that service may be different, depending on factors such as contract terms.

To analyze the reasonableness of Corrections' payments to the 15 hospitals we reviewed, we used the updated cost-to-charge ratios that we obtained from the CMS fiscal intermediaries to estimate the costs the 15 hospitals incurred in providing the inpatient medical services Corrections paid for in fiscal year 2002–03. We calculated the estimated hospital costs by multiplying the amounts hospitals charged—that is, the billed amount, according to data in Corrections HCCUP database—by the hospitals' respective

cost-to-charge ratios. We then compared those estimated hospital costs with Corrections' payments to the hospitals to estimate the operating profit realized by the hospitals for those inpatient services. Because Corrections did not consistently record the correct charged amount for some of the hospitals in our review, we were only able to perform this analysis for nine of the 15 hospitals. As Table 7 shows on the following page, estimated operating profit margins for inpatient services that the nine hospitals provided to Corrections ranged from 71.4 percent for Tenet 3 to 3.3 percent for Non-Tenet 3. Our analysis revealed that the nine hospitals collected a total of $26.1 million in payments from Corrections and made an estimated operating profit of $10.2 million, or an average operating profit margin of 39.1 percent.

Additionally, a low cost-to-charge ratio can result in a higher operating profit margin. As shown in Table 7, Tenet 3, which generated the largest operating profit margin among the nine hospitals we analyzed, also had the lowest cost-to-charge ratio. Although operating profit differs from net income in that net income further excludes nonoperating costs, the net income range for hospitals reported by CMS is significantly less than the average operating profit for the hospitals we reviewed. In a July 2003 update on the health care industry, CMS cited results from several studies indicating that most hospitals' net incomes ranged from 3 percent to 5 percent. Had Corrections performed a similar analysis on hospital charges using cost-to-charge ratios, it could have determined whether the payment rates in its contracts were resulting in reasonable profits for its contracted hospitals.

Similar to Medi-Cal, Corrections could use hospital costs to help determine reasonable rates for hospitals in its contract negotiations.

Corrections could use cost-to-charge ratios to estimate hospital costs and use the estimates as a base from which to negotiate payment rates with hospitals. A lag will always exist between the time a hospital incurs costs and levies charges and the time the information is reported and used to calculate a cost-to-charge ratio; therefore, costs determined using cost-to-charge ratios can only be estimates. However, like Medicare, the State's public health insurance program, Medi-Cal, uses hospital costs as one factor in determining rates for hospitals with which the State has not negotiated a contract. Hospitals are paid for Medi-Cal services under two payment structures. Hospitals that have contracts with the State to provide Medi-Cal services are paid a negotiated per diem rate. For hospitals not under contract, the State pays a percentage of the amounts charged based on the hospital's historical cost-to-charge ratio. Similarly, Corrections could use hospital costs to help determine reasonable rates for hospitals in its contract negotiations.

TABLE 7

Lower Cost-to-Charge Ratios Generally Result in Higher Profits for Hospitals in Fiscal Year 2002-03 (Dollars in Millions)

Inpatient Hospital	Total Inpatient Cost-to-Charge Ratio*	Hospital Charges for Inpatient Services	Calculated Hospital Costs for Inpatient Services	Corrections' Payment for Inpatient Services	Estimated Hospital Operating Profit	Percentage of Estimated Hospital Operating Profit
Tenet 1	0.16	†				
Tenet 2	0.10	†				
Tenet 3	0.12	$ 4.5	$ 0.6	$ 2.1	$ 1.5	71.4%
Tenet 4	0.14	9.8	1.4	1.8	0.4	22.2
Tenet 5	0.08	†				
Non-Tenet 1	0.24	†				
Non-Tenet 2	0.46	†				
Non-Tenet 3	0.46	12.5	5.8	6.0	0.2	3.3
Non-Tenet 4	0.26	10.9	2.8	7.5	4.7	62.7
Non-Tenet 5	0.43	3.8	1.6	2.0	0.4	20.0
Non-Tenet 6	0.33	2.8	0.9	1.5	0.6	40.0
Non-Tenet 7	0.49	3.8	1.9	3.4	1.5	44.1
Non-Tenet 8	0.54	0.8	0.4	0.7	0.3	42.9
University 1	0.18	†				
University 2	0.34	1.6	0.5	1.1	0.6	54.5
Totals		**$50.5**	**$15.9**	**$26.1**	**$10.2**	**39.1%**

Sources: Centers for Medicare and Medicaid Services fiscal intermediaries; payment data from the California Department of Corrections' (Corrections) health care cost and utilization program database.

Note: As we discuss in the Scope and Methodology section of the report, Corrections asserted the privilege contained in California Government Code, Section 6254.14, that permits it to protect from disclosure certain information associated with health care services contracts, including payment rates. Therefore, it requested that we use generic names instead of actual hospital names in our report.

* The cost-to-charge ratios use the most current available data and are pre-audit figures.

† For more than one of the 10 inpatient hospital invoices we reviewed for this hospital, the actual hospital charges—that is, the billed amounts—did not agree with the respective charges (billed) amounts in Corrections' health care cost and utilization program (HCCUP) database. Therefore, because HCCUP hospital charge data was clearly not reliable for this hospital, we did not calculate its estimated costs, profits, and profit margin.

In 2003, Corrections staff met with staff from the California Medical Assistance Commission, which negotiates Medi-Cal hospital contracts, to discuss how the California Medical Assistance Commission might assist Corrections in negotiating hospital contracts. In addition, according to HCSD, Corrections worked with the Department of Health Services to establish legislative language for an appropriate reimbursement structure and process. HCSD stated that Corrections' proposed trailer bill would allow it to pay hospitals "reasonable and allowable

costs" and to pay ambulance and any other emergency or nonemergency response services at rates established by Medicare. According to HCSD, Corrections continues to seek the advice of the California Medical Assistance Commission before and during contract negotiations with hospitals.

Corrections staff told us they were aware that hospital cost-to-charge data were available from state agencies, including the Office of Statewide Health Planning and Development, which makes spreadsheets containing hospital financial data available for public download on its Web site. However, Corrections staff elaborated that they have not explored using cost data to analyze its payment experience or to negotiate rates, focusing their efforts instead on monitoring performance under its existing hospital contract terms. Specifically, HCSD told us the following:

> The HCSD has not historically utilized [the Office of Statewide Health Planning and Development (OSHPD)] data to analyze its payments or for rate negotiations. Until October of 2003 the Health Contracts Unit did not have sufficient resources to perform this level of analysis. However, the HCSD is in the process of standardizing its negotiating and rate analysis processes and, as a result, has begun to routinely utilize OSHPD data.

Nevertheless, Corrections would be unable to consistently analyze hospital costs using cost-to-charge ratios because, as we noted earlier, it does not always record accurate charges for all hospital services in its HCCUP database. Regardless of how Corrections ultimately accomplishes making hospital costs a basis for contract negotiations, costs represent a valuable, untapped tool for determining the reasonableness of the rates for which it contracts with hospitals.

INSTITUTIONS' REASONS FOR RISING OUTPATIENT HOSPITAL PAYMENTS WERE SIMILARLY VARIED

Increasing average payments and increasing numbers of hospital visits appear to be nearly equal factors in overall outpatient hospital payment growth.

Our analysis of outpatient hospital payments revealed that both increasing average payments and increasing numbers of hospital visits appear to be nearly equal factors in the growth of outpatient hospital payments overall. However, like our findings regarding inpatient hospital payments by institution, the factors resulting in larger outpatient hospital payments varied for each institution

(see Table B.2 in Appendix B). The institutions we asked for insight about increasing outpatient hospital payments provided several reasons why their outpatient hospital payments increased.

The Deuel Vocational Institution (Deuel) stated that a factor causing its average payment per outpatient visit to increase was the dramatic increase in its population of reception-center inmates over the past five years. A reception center provides short-term housing to inmates who are just entering the correctional system and require processing, classification, and evaluation.

According to the institution's health care manager, the average daily population at Deuel's reception center was 47 percent of the total inmate population in fiscal year 1998–99 and grew to more than 60 percent of the total inmate population by fiscal year 2002–03. The health care manager stated that the growth in the number of reception-center inmates increased its hospital outpatient payments because reception-center inmates typically have more pressing health care issues than do other members of the prison population. According to the health care manager, reception-center inmates likely did not have good health care in their previous environments and thus came to Deuel with serious and urgent health care needs. The health care manager went on to say that the growing number of reception-center inmates being sent to Deuel, coupled with their health risks, caused a dramatic increase in the number of more-expensive emergency room visits made by its prison population. In contrast, because Corrections has provided care to stabilize the health of existing inmates, they generally require less expensive routine health care.

New Inmates Do Not Appear to Need More Costly Outpatient Procedures Than Do Existing Inmates

Corrections' data do not fully support Deuel's conclusion that its reception-center inmates caused the increase in Deuel's outpatient hospital payments.

Although the observations made by Deuel's health care manager may have merit, Corrections' data do not fully support the health care manager's conclusion that Deuel's reception-center inmates caused the increase in the institution's outpatient hospital payments. Instead, a significant price increase for similar services, as well as potentially more complex services being performed, caused the increased price per visit.

To test the validity of the assertion of Deuel's health care manager, we analyzed the eight prisons that had the largest increase in payments for outpatient visits that were attributable to price increases. As shown in Table 8, four of the institutions

had reception centers and four did not. In addition, during fiscal year 2002–03, two of the four institutions with reception centers had very small average daily populations at those centers. Therefore, the high outpatient costs at these two institutions were likely not attributable to their reception-center inmates. Specifically, Donovan and High Desert State Prison (High Desert) had average daily populations of only 981 and 388, respectively, at their reception centers during that year. In contrast, other institutions with reception centers and significantly larger reception-center populations had significantly smaller increases in payments to outpatient facilities due to price increases. For example, Wasco State Prison had an average daily population of 4,572 at its reception center, with $270,808 in outpatient cost increases attributable to price increases, which is comparatively less than Donovan and High Desert, as shown in Table 8. Similarly, North Kern State Prison had an average daily population of 4,068 at its reception center, with $125,599 in outpatient cost increase attributable to price increases.

TABLE 8

Large Inmate Populations at Reception Centers Do Not Appear to Drive Increased Outpatient Costs

Correctional Institution	Reception Center	Amount of Fiscal Year 2002–03 Outpatient Cost Increase Attributable to Price Increases
California Substance Abuse Treatment Facility at Corcoran	No	$733,689
R. J. Donovan Correctional Facility	Yes	652,395
Deuel Vocational Institution	Yes	635,038
San Quentin State Prison	Yes	530,081
Folsom State Prison	No	480,921
High Desert State Prison	Yes	424,091
California Correctional Center	No	375,378
Sierra Conservation Center	No	365,159

Sources: California Department of Corrections' Estimates and Statistical Analysis Section, Offender Information Services Branch; Appendix B, Table B.2.

On the other hand, the comments of Deuel's health care manager about the expensive outpatient services indicate that significant price increases for similar services were the cause of that institution's increased price per visit. The health care manager informed us that the outpatient services for scheduled appointments or surgery were reimbursed at a percentage of

charges with a limit in fiscal year 1998–99 and a higher limit in fiscal year 2002–03. In addition, the health care manager told us that the hospital's usual and customary charges increased. For example, a routine scheduled appointment was reimbursed at a certain percentage in each fiscal year, but in fiscal year 1998–99, the adjusted amount Corrections paid was 143 percent higher than in fiscal year 2002–03.[8] Moreover, the health care manager said outpatient services provided in the emergency room were reimbursed at a higher percentage of total charges and are essentially unlimited.

If the 143 percent price increase in the hospital's usual and customary charges carried forward to other outpatient services for Deuel, then significant price increases by the hospital for similar services, as well as potentially more-complex services being performed, were the cause of the increased price per outpatient visit. A closer analysis of Deuel's hospital payments for outpatient visits from fiscal years 1998–99 through 2002–03 revealed that payments made for outpatient visits to an emergency room, mostly one hospital, increased $821,000. This increase accounts for 90 percent of its $909,000 overall increase in outpatient hospital payments. Although the number of emergency room and nonemergency room outpatient visits each increased by about 200 in the four-year period, a significant increase in its average payment for emergency room visits caused its average payment for outpatient visits to increase overall. Specifically, Deuel's average hospital payment for emergency room outpatient visits increased from less than $950 per visit in fiscal year 1998–99 to more than $3,300 per visit in fiscal year 2002–03. In contrast, Deuel's average payment per nonemergency room outpatient visit decreased from nearly $475 in fiscal year 1998–99 to slightly more than $450 in fiscal year 2002–03. Therefore, the more-expensive outpatient services provided in an emergency room, for which Deuel pays a percentage of the hospital's total charge without a limit, caused its average payment per outpatient visit to increase.

A significant increase in Deuel's average payment for emergency room visits caused its average payment for outpatient visits to increase overall.

We asked HCSD whether it had performed any analysis to determine the extent to which increases in outpatient costs were driven by rising costs per visit at reception centers versus other institutions and received the following response:

[8] As we discuss in the Scope and Methodology section of the report, Corrections asserted the privilege contained in California Government Code, Section 6254.14, that permits it to protect from disclosure certain information associated with health care services contracts, including rates. Thus, we do not disclose the rates Corrections paid because it asserts that disclosure of this information could impact its ability to negotiate future contracts with providers that may insist on like terms.

> HCSD has not conducted a comprehensive analysis of outpatient cost drivers between reception centers vs. general population institutions. In recognition of the need for analysis of cost drivers, in the Spring of 2004, [Corrections] formed a specialty care cost mitigation work group. This work group is tasked with developing an instrument to perform an analysis of "outlier" cost and utilization for both inpatient and outpatient services. HCSD will conduct an analysis of high cost outpatient visits upon the hiring of additional resources for HCCUP.

We also specifically asked if Corrections had performed any studies on the cost of health care for individuals coming into a reception center from parole versus from a county jail and were told the following:

> Currently, [Corrections] lacks the automation infrastructure to perform this type of analysis. The Departmental databases that collect reception center inmate data [are] not linked to any of the programs that collect health care data. Until such time that there is sufficient resources and automation infrastructure to comprehensively collect and track all data elements, [Corrections] cannot perform this level of analysis. [Corrections] is moving forward with such technology through the Business Information System and the Strategic Offender Management System information databases.

New and Existing Inmates' Visits to Off-Site Emergency Rooms Varied Significantly

The frequency of inmates going to hospital emergency rooms for outpatient visits varied significantly, regardless of the type of health care facility at the correctional institution.

To test further the validity of the Deuel health care manager's observation related to the high number of emergency room visits at reception centers, we analyzed the number of off-site emergency room visits made by inmates at various institutions with and without reception centers. In our analysis, we also considered the level of medical care that could be provided at each institution—whether it had a general acute care hospital, a correctional treatment center, or an outpatient housing unit. Table 9 on the following page shows that the frequency of inmates going to hospital emergency rooms for outpatient visits varied significantly, regardless of the type of health care facility at the correctional institution.

TABLE 9

The Frequency of Outpatient Visits to Emergency Rooms Varied Significantly for Institutions Housing New and Existing Inmates

Correctional Institution	Type of Health Care Facility*	Frequency of Inmate Emergency Room Outpatient Visits in Fiscal Year 2002–03†
With a Reception Center		
R. J. Donovan Correctional Facility	CTC	1 in 25
North Kern State Prison	CTC	1 in 48
Deuel Vocational Institution	OHU	1 in 15
San Quentin State Prison	OHU	1 in 76
Without a Reception Center		
California State Prison, Sacramento	CTC	1 in 18
California State Prison, Solano	CTC	1 in 1,926
California Men's Colony	HOSP	1 in 89
California Medical Facility	HOSP	1 in 411
California Correctional Center	OHU	1 in 26
California Rehabilitation Center	OHU	1 in 353

Sources: California Department of Corrections' (Corrections) health care cost and utilization program database; Corrections' Estimates and Statistical Analysis Section, Offender Information Services Branch.

* HOSP: general acute care hospital; CTC: correctional treatment center; OHU: outpatient housing unit.

† We calculated the frequency of visits by dividing the average daily inmate population at the respective correctional institution by the number of hospital emergency room visits and present the resulting average as a ratio.

It is interesting to note that both Deuel and San Quentin State Prison have reception centers with average daily populations that are about half of their total average daily populations, and both have outpatient housing units. However, one in 15 inmates from Deuel was sent to an off-site emergency room, and only one in 76 San Quentin State Prison inmates was sent to an off-site emergency room. Our analysis revealed similar findings when comparing the frequency of emergency room visits at other institutions with and without reception centers. For example, California State Prison, Sacramento (Sacramento), which has a correctional treatment center but no reception center, sent more inmates to emergency rooms than did Donovan and North Kern State Prison, which also have correctional treatment centers as well as reception centers. Also surprising is the number of off-site emergency room visits at the California Men's Colony, which has a hospital on site. Although one in 89 inmates at that facility was sent to an off-site emergency room for an outpatient visit, only one in 411 inmates at the California Medical Facility, which also has a

Based on Corrections' data, we concluded that an institution's increasing outpatient costs could not be directly related to the institutions having a reception center.

hospital on site, was sent to an off-site emergency room. Based on these data, we concluded that an institution's increasing outpatient costs could not be directly related to the institution's having a reception center.

We asked HCSD if it had performed any analysis related to the extent that increased use of emergency rooms were contributing to the price per outpatient visit and were informed:

> As stated . . . above, HCSD has established a work group to develop and provide on-going analysis on such outpatient [emergency room] visits.

It Is Unclear Why the Number of Outpatient Visits From Each Institution Varied Widely and the Aggregate Number of Outpatient Visits Increased Significantly

Our analysis of outpatient visits made by inmates from each institution revealed that Sacramento had one of the largest increases in payments for outpatient services due to an increased number of outpatient visits. As we did for emergency room visits, we analyzed total outpatient visits by the type of health care facilities within institutions with reception centers and those without reception centers. For example, as shown in Table 10, Sacramento, which does not have a reception center but does have a correctional treatment center, had an average of one outpatient visit for every five inmates—more than three and one-half times greater than that of California State Prison, Solano, which also does not have a reception center but has a correctional treatment center. Considering the perspective of the Deuel health care manager regarding the effect that having a reception center had on the number of outpatient visits per inmate, Sacramento's volume of inmate visits is of even more concern because it is nearly five times that of North Kern State Prison, which has a correctional treatment center like Sacramento but had an average daily population of nearly 4,100 inmates at its reception center. While some institutions may have inmate populations that are generally healthier than others, this reason alone would not seem to account for some institutions sending inmates to outpatient visits at rates three to 20 times the rate of institutions with similar types of health care facilities.

TABLE 10

The Frequency of Outpatient Visits Per Inmate Varied Significantly Between Similar Institutions

Correctional Institution	Type of Health Care Facility*	Frequency of Inmate Outpatient Visits in Fiscal Year 2002–03†
With a Reception Center		
R. J. Donovan Correctional Facility	CTC	1 in 6
North Kern State Prison	CTC	1 in 24
Deuel Vocational Institution	OHU	1 in 7
San Quentin State Prison	OHU	1 in 19
Without a Reception Center		
California State Prison, Sacramento	CTC	1 in 5
California State Prison, Solano	CTC	1 in 18
California Men's Colony	HOSP	1 in 21
California Medical Facility	HOSP	1 in 11
California Correctional Center	OHU	1 in 15
California Rehabilitation Center	OHU	1 in 353

Sources: California Department of Corrections' (Corrections) health care cost and utilization program database; Corrections' Estimates and Statistical Analysis Section, Offender Information Services Branch.

* HOSP: general acute care hospital; CTC: correctional treatment center; OHU: outpatient housing unit.

† We calculated the frequency of visits by dividing the average daily inmate population at the respective correctional institution by the number of hospital outpatient visits and present the resulting average as a ratio.

We asked the health care manager at Sacramento a series of questions to determine a reason for a 329 percent increase in the number of outpatient visits for this institution—from 147 in fiscal year 1998–99 to 630 in fiscal year 2002–03. However, the manager was unable to provide any insights. For example, according to the health care manager, the number of inmates housed at the prison had not increased, no changes occurred requiring institutions to provide more frequent outpatient hospital care to inmates, and no crises arose related to health care, such as an epidemic. Additionally, Sacramento's health care manager provided no indication that any change had occurred in how the institution determined when an inmate needed outpatient hospital services. Further, he indicated it would be difficult to obtain the data that would have allowed him to determine if there had been a reduction in the number of inmates who were treated on site or at other nonhospital settings, such as other correctional medical facilities.

The Sacramento health care manager also said that the data we sent him from the HCCUP database that included the ICD-9-CM diagnosis codes was of limited value because the diagnosis codes are general in nature and not completely descriptive of what patients actually need or receive. Also, according to the health care manager, the same diagnosis code, used for different patients, could result in varying charges based on patient need and the actual services provided. In line with the Sacramento health care manager, the Deuel health care manager agreed that the ICD-9-CM diagnosis codes are only indicators of why patients seek medical attention and have no bearing on actual costs. ICD-9-CM diagnosis codes do not give an accurate picture of the scope of service that was received by a patient or serve as a true indicator of what really happened. According to the Deuel health care manager, ICD-9-CM diagnosis codes are very subjective for several reasons. One reason is that typically a physician does not use an ICD-9-CM diagnosis code in a report or consult; rather, the staff responsible for coding and submitting the medical claim interprets the doctor's notes and selects a code that they feel is appropriate. Also, the same ICD-9-CM diagnosis code is used for a surgery consult, the surgery itself, and the follow-up appointment.

Neither Corrections nor we can adequately analyze the data in Corrections' HCCUP database because medical procedure codes were not consistently entered from hospital outpatient invoices.

The Sacramento and Deuel health care managers' comments are correct. Neither Corrections nor we could adequately analyze the data in its HCCUP database because although Sacramento and Deuel consistently entered the ICD-9-CM diagnosis codes, they did not consistently enter the ICD-9-CM procedure codes or CPT codes from the hospital outpatient invoices they paid. Therefore, to determine the outpatient procedures that had been paid for would require someone to laboriously locate and review invoices. For example, during fiscal year 1998–99, Sacramento entered the ICD-9-CM procedure codes for only 13 of 152 outpatient payment records and the CPT codes for two of the 152 outpatient payment records. In fiscal year 2002–03, the numbers were only 45 of 647 outpatient payment records for the ICD-9-CM procedure codes and none of 647 outpatient payment records for the CPT codes (an outpatient visit can have more than one payment record).

Because the Sacramento health care manager did not provide any insights about the cause of the 329 percent increase in outpatient visits from our series of questions, we repeated our questions. We inquired again to ensure that he understood that we were interested in any causes that he had analyzed or could now analyze based on either the data we sent him or data that he already had available to him. In response to a question

regarding inmate demographics, his second response indicated that no changes in the demographics of the inmate population had occurred. In response to a question regarding analysis of the dramatic increase in outpatient visits he may have already performed, he provided no indication of having performed such an analysis.

The Sacramento health care manager did, however, indicate that he reviewed 90 of the 230 cases we found in which the charges totaled less than $100. He stated that all these charges were for office visits to specialists regarding medical conditions that could not be treated at correctional facilities. Although it appears that very little of the outside facilities' resources were used for these visits, the Sacramento health care manager stated that many of these visits were either initial consultations or follow-up visits with specialists. According to the health care manager, it is customary for a specialist to see a patient before recommending a specific course of treatment, such as surgery, and to provide at least one follow-up visit for a patient after providing treatment.

Because he gave us no insights into the nearly 100 other cases that had charges of less than $100 and for which the patient had no additional procedure performed during the fiscal year, we asked HCSD to explain why these cases could not have been treated at correctional treatment centers like Sacramento. HCSD responded as follows:

> In order to evaluate medical necessity, it is sometimes necessary for a patient to be seen by outside specialists knowledgeable in that specific medical and/or surgical area. The evaluation assists in determining the clinical management plan, including conservative management that may not require additional treatment, studies, procedures or follow-up consultation.

HCSD stated that it had not completed an analysis of the causes of the increases in outpatient visits between fiscal years 1998–99 and 2002–03.

To gain perspective on reasons for the rising trend in outpatient visits systemwide, we asked HCSD if it had performed any analysis of the causes of the dramatic 98 percent increase in outpatient visits—from 7,547 in fiscal year 1998–99 to 14,923 in fiscal year 2002–03—and were informed that:

> The HCSD has not completed a detailed analysis of the causes of the increases in outpatient visit[s] from FY 1998/99 to 200[2]/2003. As stated above, [Corrections]

acknowledges the need for this type of analysis. With the anticipated staff augmentation and focus, HCSD will prepare this analysis within the next fiscal year.

We also asked HCSD what quality control review procedures it has implemented to ensure that its health care professionals do not request outside outpatient services that could be performed within the institution. HCSD provided the following information:

> Healthcare policy dictates that inmate-patients receive [cost-effective] medical care, which does not differ in its essential elements from what is provided in the general community. To this purpose, [Corrections] performs utilization management statewide. The purpose of the program is to execute a process for providing quality health care while containing cost. The UM process includes select prospective, concurrent and retrospective reviews, and the prospective review process can include four levels of review to determine eligibility. In addition, all off-site medical care requires an approval by the Health Care Manager or designee . . .
>
> The UM Guidelines provides an overview of the UM Program within [Corrections'] health care delivery system. The UM Program was taught in the mandatory statewide videoconference in December 2003. The training included all physicians and nurses as well as many other classifications. One of the objectives as stated in the UM Guidelines is to determine the most appropriate statewide utilization of health care resources, including the site of service delivery. HCSD UM staff have begun monitoring and performing assessments of compliance with the UM processes as noted [earlier]. Within the next six months, a quality control process will be developed that includes monthly audits of a sample of reviews performed by UM staff. The data reviewed will include the site of service delivery for quality and cost containment measures.
>
> In addition, the HCSD is defining and developing a Specialty Care Program standard management report that will better integrate contracts, cost, utilization and clinical information. This report will be used to identify patterns at a statewide, institution and provider level in order to reduce inappropriate use of services, and

HCSD stated that within the next six months, a quality control process will be developed that includes monthly audits of a sample of reviews performed by UM staff.

assist with prioritizing and developing select policies, protocols and training and with contract negotiations and developing budgets and projections.

CONTRACT PROVISIONS ALSO RESULTED IN CORRECTIONS PAYING HIGHER AMOUNTS FOR OUTPATIENT HEALTH CARE

On average, Corrections paid two to four times the amounts Medicare would have paid the same hospitals for the same outpatient services.

Similar to its contract provisions for inpatient hospital care, Corrections' outpatient contract provisions base payments on a percentage of the hospitals' billed charges rather than costs and generally resulted in Corrections paying on average two to four times the amounts Medicare would have paid for the same outpatient services. The outpatient payment terms varied among the contracts Corrections has with the 14 hospitals we reviewed.[9] Generally, however, the contracts stipulate that Corrections pay certain percentages of the hospitals' billed charges.[10] Some hospital contracts place limits (caps) on Corrections' payments—for example, a cap on the payment for each outpatient visit or for a particular outpatient service, such as surgery. However, for emergency room outpatient services, all but three contracts stipulate that Corrections pay emergency room outpatient services at a percentage of the hospitals' billed charges without a cap.

We compared the amounts Corrections paid hospitals, on the outpatient invoices we randomly selected to review, to the amounts Medicare would have paid for the same outpatient services. Our comparison revealed that Corrections generally paid most of the 14 hospitals we reviewed multiples of the Medicare payment amount, as shown in Table 11. Corrections' higher payments were most evident for emergency room outpatient services. Specifically, for the invoices we reviewed, Corrections paid on average two and one-half times the

[9] Although we reviewed Corrections' inpatient payments to 15 hospitals, we did not review Corrections' outpatient payments for one of the 15 hospitals because in fiscal year 2002–03 Corrections paid this hospital less than $10,000 for outpatient services.

[10] As we discuss in the Scope and Methodology section of the report, Corrections asserted the privilege contained in California Government Code, Section 6254.14, that permits it to protect from disclosure certain information associated with health care services contracts, including rates. Thus, we do not disclose the floor and ceiling of the contract provisions because Corrections asserts that disclosure of this information could impact its ability to negotiate future contracts with providers that may insist on like terms.

amounts Medicare would have paid for the same outpatient services overall. However, when the outpatient care was an emergency room visit, Corrections paid on average four times the amount Medicare would have paid for the same service.

Corrections typically pays a percentage of the hospital charge without a cap for emergency room outpatient services, apparently in recognition of the urgent and potentially intensive health care that inmates need. By comparison, Medicare would pay hospitals for the same emergency room services based on the CPT codes the hospitals submit, which represent the varied levels or intensity of the hospital services provided. Thus, the higher the level or intensity of hospital services, the higher the code submitted by the hospital and the higher the Medicare payment. Medicare also pays for most ancillary tests and procedures, such as laboratory tests and X-rays, that the hospital might perform as part of an emergency room visit.

TABLE 11

The California Department of Corrections' Outpatient Payments Were Higher Than What Medicare Would Have Paid for the Same Services

Type of Payment*	Number of Invoices Reviewed	Calculated Corrections to Medicare Payment Ratio†
Emergency room visits	17	4.0
Nonemergency room outpatient visits	38	2.0
Overall	55	2.5

Sources: Hospital invoices that the California Department of Corrections (Corrections) paid for the outpatient care hospitals provided to inmates; Medicare outpatient payment calculations based on the ambulatory payment classification codes derived from the hospital-invoiced outpatient services and procedures.

* Corrections' accounting codes in its health care cost and utilization program database identify payments for emergency room visits versus nonemergency room outpatient visits.

† Unlike our analysis of Corrections' inpatient payments, we did not adjust the Medicare outpatient payments to reflect the updated hospital cost-to-charge ratios from fiscal year 2002–03.

The wide range in Corrections' payments to hospitals compared with the amounts Medicare would have paid these hospitals for the same outpatient services indicates the disparity between payments based on a percentage of hospital-billed

charges (Corrections' payment system) to payments based on the level of services provided and their estimated costs (Medicare's payment system). Our analysis of Corrections' outpatient payments revealed that 10 of the 17 payments for emergency room visits were to Tenet hospitals and ranged from 2.8 to 19.8 times the amounts that Medicare would have paid the Tenet hospitals for the same services. The other seven payments for emergency room outpatient visits were to non-Tenet hospitals and ranged from 1.1 to 11.1 times the amounts that Medicare would have paid the non-Tenet hospitals for the same services. Additionally, of the 38 payments for nonemergency room outpatient visits, 13 were to Tenet hospitals and 25 were to non-Tenet hospitals. Corrections' payments to the Tenet hospitals for the nonemergency room outpatient visits ranged from 0.2 to 6.9 times the amounts that Medicare would have paid, and its payments to the non-Tenet hospitals ranged from 1.3 to 14.6 times the amounts that Medicare would have paid.

As we discussed in a previous section, some hospitals, including some Tenet hospitals, manipulated the Medicare outlier formula to receive higher payments by aggressively increasing their billed charges. Therefore, as with its inpatient hospital payments, Corrections could improve its payment system by basing its outpatient hospital payments on costs rather than hospital charges.

The significant difference in Corrections' payments to what Medicare would have paid indicates that Corrections could achieve significant savings if it could pay the same rates as Medicare for its outpatient hospital services.

For the invoices we reviewed, Corrections paid more than the amount Medicare would have paid for the same outpatient services for all 17 emergency room outpatient visits and all but five of the 38 nonemergency room outpatient visits. In total, Corrections paid $90,800 for the 17 emergency room outpatient visits compared with $23,000 that Medicare would have paid; and Corrections paid $136,800 for the 38 nonemergency room outpatient visits compared with $66,900 that Medicare would have paid. Although we did not use a sampling methodology that would allow us to determine a statistically valid projection for the entire universe of Corrections' outpatient payments, the significant difference in Corrections' payments to what Medicare would have paid indicates that Corrections could achieve significant savings if it could pay the same rates as Medicare for its outpatient hospital services.

As a rough illustration of the potential savings that Corrections might achieve if it could pay the same rates as Medicare, and if the 17 emergency room outpatient payments we reviewed

were representative of its nearly 3,500 payments it classified as payments for emergency room outpatient services at all hospitals, Corrections could potentially reduce the $6.2 million it spent on emergency room outpatient services in fiscal year 2002–03 to $1.6 million. Similarly, if it could pay Medicare rates and if the 38 nonemergency room outpatient payments we reviewed were representative of its nearly 11,500 payments for nonemergency room outpatient services at all hospitals, Corrections could potentially reduce the $13.6 million it spent for nonemergency outpatient services in fiscal year 2002–03 to $6.8 million. We realize that the potential savings of $4.6 million in emergency room outpatient payments and $6.8 million in nonemergency room outpatient payments may not be entirely achievable. However, the potential for Corrections to achieve some level of savings appears significant if it could pay hospitals amounts determined by a payment system such as Medicare's, which is based on an estimate of the resources the hospitals use and the associated costs for the services the hospitals provide.

RECOMMENDATIONS

To understand the reasons behind the rising trend in its inpatient and outpatient hospital payments, Corrections should do the following:

- Enter complete and accurate hospital-billing and medical procedures data in its HCCUP database for subsequent comparison and analysis by HCSD and correctional institutions of the medical procedures that hospitals are performing and their associated costs.

- Perform regular analysis of its health care cost and utilization data, monitor its hospital payment trends, and investigate fully the reasons why its costs are rising for the purpose of implementing cost containment measures.

- Investigate the significant and sudden increase in its inpatient hospital payments, beginning in fiscal year 2000–01, for the purpose of determining whether renegotiating contract payment rates, reducing the length of stay in contract hospital beds, or other cost containment measures can most effectively reduce its contract hospital costs.

- Complete its analysis of high-cost cases to determine why the number of high-cost inpatient cases and more-expensive outpatient visits are rising so that it can identify cost-effective solutions to its increasing health care costs. For example, Corrections should fully investigate the extent to which each of the potential cost drivers it has identified as part of its analysis of high-cost inpatient cases is increasing its hospital inpatient costs.

- Follow up with all institutions using new hospital contracts to determine if renegotiated contract payment terms are resulting in significantly higher costs, as they did for the two institutions that informed us of the significant effect on their inpatient hospital costs for high-cost cases.

To control increases in inpatient and outpatient hospital payments caused by contract payment provisions, Corrections should do the following:

- Revisit hospital contract provisions that pay a discount on the hospital-billed charges and consider renegotiating these contract terms based on hospital costs rather than hospital charges. Corrections should also reassess hospital contract provisions that require it to pay a percentage of hospitals' billed charges for outpatient visits, including emergency room outpatient visits. To renegotiate contract rates, Corrections should use either existing cost-based benchmarks, such as Medicare or Medi-Cal rates, or hospital cost-to-charge ratios to estimate hospital costs. Further, should Corrections renegotiate hospital contract payment terms, it should perform subsequent analysis to quantify and track the realized savings or increased costs resulting from each renegotiated contract.

- Obtain and maintain updated cost-to-charge ratios for each contracted hospital, using data from the Centers for Medicare and Medicaid Services, the Department of Health Services, or the Office of Statewide Health Planning and Development. It should use these ratios to calculate estimated hospital costs for use as a tool in contract negotiations with hospitals and for monitoring the reasonableness of payments to hospitals.

- Require hospitals to include DRG codes on invoices they submit for inpatient services to help provide a standard, along with hospital charges, by which Corrections can measure its payments to hospitals as well as case complexity.

- Detect abuses of contractual stop-loss provisions by monitoring the volume and total amounts of hospital payments made under stop-loss provisions, which are intended to protect hospitals from financial loss in exceptional cases, not to become a common method of payment.

To control rising inpatient and outpatient hospital payments caused by increases in the numbers of hospital admissions or visits, Corrections should do the following:

- Include in its utilization management quality control process a review of how utilization management medical staff assess and determine medical necessity, appropriateness of treatment, and need for continued hospital stays.

- Investigate the reasons why the number of outpatient visits by inmates has nearly doubled even though the inmate population has remained relatively constant, and implement plans to correct the significant increase in outpatient hospital visits.

- Continue with its plan to analyze how mentally ill inmates are affecting inpatient costs and utilization at its institutions.

We conducted this review under the authority vested in the California State Auditor by Section 8543 et seq. of the California Government Code and according to generally accepted government auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,

ELAINE M. HOWLE
State Auditor

Date: July 27, 2004

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APPENDIX A

Hospital Payments by Correctional Institution for Fiscal Years 1998–99 Through 2002–03

The California Department of Corrections (Corrections) uses its health care cost and utilization program (HCCUP) database to track data related to the health care services inmates receive, including payments to hospitals. Each correctional institution typically employs a HCCUP analyst, who is responsible for processing and adjusting health care invoices before sending the invoices to the institution's assigned regional accounting office, where the invoice is ultimately processed for payment. Using Corrections' HCCUP database, we identified payments made to hospitals for fiscal years 1998–99 through 2002–03 for medical services that inmates received. These medical services included but were not limited to inpatient, outpatient, physician, ambulance, and laboratory services.

Table A.1 on the following page shows hospital payments for health care provided to inmates at each of the 33 correctional institutions in California, along with the average daily population for each institution for fiscal years 1998–99 through 2002–03.[11] The table shows that the total average cost per inmate rose to $748 in fiscal year 2002–03 from $353 in fiscal year 1998–99, an increase of nearly 112 percent. The biggest increase occurred in fiscal year 2000–01, when the cost per inmate grew to $527, an increase of more than 37 percent over fiscal year 1999–2000. The table also shows that the average daily inmate population remained relatively stable at approximately 151,000 inmates within the institutions. The stability of the inmate population is also reflected in the average daily populations at most institutions; Avenal State Prison and Wasco State Prison were among the few exceptions to this trend.

The reasons for the trend in increasing hospital payments are discussed in more detail in the Audit Results section.

[11] Although California currently has 32 adult correctional institutions, 33 institutions were counted in this audit because the Northern California Women's Facility made payments for hospital services during fiscal year 2002–03 but was deactivated early in 2003.

TABLE A.1

Hospital Payments Increased Although Inmate Populations Remained Relatively Stable

Correctional Institution	Fiscal Year 1998–99	1999–2000	2000–01	2001–02	2002–03	Totals
Avenal State Prison						
Inpatient	$811,047	$684,335	$1,245,370	$1,469,677	$2,036,693	**$6,247,122**
Outpatient	157,589	132,407	173,955	387,553	617,616	**1,469,120**
Other	470,914	453,728	580,283	721,649	704,074	**2,930,648**
Totals	**$1,439,550**	**$1,270,470**	**$1,999,608**	**$2,578,879**	**$3,358,383**	**$10,646,890**
Average daily population	5,735	6,381	6,789	6,692	6,882	
Average per inmate	$251	$199	$295	$385	$488	
California Correctional Center						
Inpatient	$1,274,722	$1,160,405	$356,023	$1,281,673	$2,100,692	**$6,173,515**
Outpatient	230,251	257,046	216,056	602,838	796,948	**2,103,139**
Other	373,070	334,427	223,371	466,995	484,666	**1,882,529**
Totals	**$1,878,043**	**$1,751,878**	**$795,450**	**$2,351,506**	**$3,382,306**	**$10,159,183**
Average daily population	5,860	5,845	5,840	5,837	5,812	
Average per inmate	$320	$300	$136	$403	$582	
California Correctional Institution						
Inpatient	$329,401	$545,286	$927,650	$690,092	$872,919	**$3,365,348**
Outpatient	66,554	94,368	164,909	226,264	291,029	**843,124**
Other	349,819	396,097	489,224	442,903	366,133	**2,044,176**
Totals	**$745,774**	**$1,035,751**	**$1,581,783**	**$1,359,259**	**$1,530,081**	**$6,252,648**
Average daily population	5,929	5,577	5,429	5,233	5,330	
Average per inmate	$126	$186	$291	$260	$287	
California Institution for Men						
Inpatient	$2,955,391	$2,409,727	$2,824,723	$3,799,455	$3,205,368	**$15,194,664**
Outpatient	57,478	47,780	27,851	53,118	73,944	**260,171**
Other	347,175	297,423	346,718	423,716	358,322	**1,773,354**
Totals	**$3,360,044**	**$2,754,930**	**$3,199,292**	**$4,276,289**	**$3,637,634**	**$17,228,189**
Average daily population	6,348	6,268	6,251	6,322	6,445	
Average per inmate	$529	$440	$512	$676	$564	
California Institution for Women						
Inpatient	$1,653,914	$2,442,137	$2,344,937	$2,062,237	$1,940,709	**$10,443,934**
Outpatient	62,674	83,989	132,192	175,737	216,220	**670,812**
Other	234,726	220,744	386,892	378,406	413,993	**1,634,761**
Totals	**$1,951,314**	**$2,746,870**	**$2,864,021**	**$2,616,380**	**$2,570,922**	**$12,749,507**
Average daily population	1,791	1,888	1,881	1,769	1,676	
Average per inmate	$1,090	$1,455	$1,523	$1,479	$1,534	
California Medical Facility						
Inpatient	$2,899,488	$2,156,569	$3,630,938	$3,470,277	$5,186,988	**$17,344,260**
Outpatient	459,902	540,342	682,454	589,880	643,292	**2,915,870**
Other	893,064	737,936	1,165,122	1,053,596	1,120,704	**4,970,422**
Totals	**$4,252,454**	**$3,434,847**	**$5,478,514**	**$5,113,753**	**$6,950,984**	**$25,230,552**
Average daily population	3,110	3,044	3,119	3,239	3,289	
Average per inmate	$1,367	$1,128	$1,756	$1,579	$2,113	

Correctional Institution	Fiscal Year 1998–99	1999–2000	2000–01	2001–02	2002–03	Totals
California Men's Colony						
Inpatient	$989,502	$1,374,173	$1,776,482	$1,398,265	$2,244,653	**$7,783,075**
Outpatient	326,394	303,361	361,095	421,370	642,172	**2,054,392**
Other	474,718	478,334	574,209	602,696	766,531	**2,896,488**
Totals	**$1,790,614**	**$2,155,868**	**$2,711,786**	**$2,422,331**	**$3,653,356**	**$12,733,955**
Average daily population	6,655	6,816	6,755	6,567	6,505	
Average per inmate	$269	$316	$401	$369	$562	
California Rehabilitation Center						
Inpatient	$829,988	$1,131,147	$1,097,201	$1,511,716	$796,377	**$5,366,429**
Outpatient	10,642	19,322	23,525	33,575	17,201	**104,265**
Other	51,666	76,187	125,443	147,937	59,433	**460,666**
Totals	**$892,296**	**$1,226,656**	**$1,246,169**	**$1,693,228**	**$873,011**	**$5,931,360**
Average daily population	4,881	4,850	4,790	4,614	4,587	
Average per inmate	$183	$253	$260	$367	$190	
California State Prison, Corcoran						
Inpatient	$596,024	$761,604	$1,434,112	$1,827,710	$2,424,270	**$7,043,720**
Outpatient	110,947	147,798	135,524	246,260	728,169	**1,368,698**
Other	348,073	292,569	451,438	658,753	1,196,176	**2,947,009**
Totals	**$1,055,044**	**$1,201,971**	**$2,021,074**	**$2,732,723**	**$4,348,615**	**$11,359,427**
Average daily population	4,760	4,950	4,922	4,913	4,862	
Average per inmate	$222	$243	$411	$556	$894	
California State Prison, Los Angeles County						
Inpatient	$536,766	$838,739	$1,344,479	$1,873,189	$1,704,943	**$6,298,116**
Outpatient	93,646	108,729	176,440	190,058	276,367	**845,240**
Other	115,050	148,436	123,733	212,513	318,807	**918,539**
Totals	**$745,462**	**$1,095,904**	**$1,644,652**	**$2,275,760**	**$2,300,117**	**$8,061,895**
Average daily population	4,188	4,189	4,180	4,034	4,177	
Average per inmate	$178	$262	$393	$564	$551	
California State Prison, Sacramento						
Inpatient	$715,432	$292,477	$994,558	$1,352,438	$2,176,227	**$5,531,132**
Outpatient	153,942	168,947	237,718	699,283	739,426	**1,999,316**
Other	249,383	152,567	286,080	450,026	408,362	**1,546,418**
Totals	**$1,118,757**	**$613,991**	**$1,518,356**	**$2,501,747**	**$3,324,015**	**$9,076,866**
Average daily population	3,090	3,011	2,952	2,945	2,977	
Average per inmate	$362	$204	$514	$849	$1,117	
California State Prison, Solano						
Inpatient	$947,082	$1,061,464	$1,880,733	$1,674,056	$2,978,305	**$8,541,640**
Outpatient	83,542	84,112	350,860	340,069	404,446	**1,263,029**
Other	265,717	169,828	581,120	511,899	507,126	**2,035,690**
Totals	**$1,296,341**	**$1,315,404**	**$2,812,713**	**$2,526,024**	**$3,889,877**	**$11,840,359**
Average daily population	5,711	5,790	5,803	5,803	5,778	
Average per inmate	$227	$227	$485	$435	$673	

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Correctional Institution	Fiscal Year 1998–99	1999–2000	2000–01	2001–02	2002–03	Totals
California Substance Abuse Treatment Facility at Corcoran						
Inpatient	$649,089	$914,757	$1,590,636	$3,654,395	$4,346,943	**$11,155,820**
Outpatient	111,715	178,698	280,155	637,642	1,060,041	**2,268,251**
Other	352,113	360,195	631,019	1,239,824	1,078,112	**3,661,263**
Totals	**$1,112,917**	**$1,453,650**	**$2,501,810**	**$5,531,861**	**$6,485,096**	**$17,085,334**
Average daily population	5,997	6,384	6,271	6,384	6,583	
Average per inmate	$186	$228	$399	$867	$985	
Calipatria State Prison						
Inpatient	$393,090	$198,473	$458,020	$276,124	$2,231,355	**$3,557,062**
Outpatient	222,065	192,215	299,136	235,954	401,284	**1,350,654**
Other	179,687	161,914	309,144	284,934	537,133	**1,472,812**
Totals	**$794,842**	**$552,602**	**$1,066,300**	**$797,012**	**$3,169,772**	**$6,380,528**
Average daily population	4,073	4,112	4,128	4,053	4,126	
Average per inmate	$195	$134	$258	$197	$768	
Centinela State Prison						
Inpatient	$342,933	$213,323	$340,259	$369,640	$1,250,151	**$2,516,306**
Outpatient	269,176	275,391	377,448	446,721	435,395	**1,804,131**
Other	198,343	211,381	317,132	353,670	422,001	**1,502,527**
Totals	**$810,452**	**$700,095**	**$1,034,839**	**$1,170,031**	**$2,107,547**	**$5,822,964**
Average daily population	4,419	4,531	4,470	4,313	4,502	
Average per inmate	$183	$155	$232	$271	$468	
Central California Women's Facility						
Inpatient	$1,575,620	$1,263,953	$2,322,338	$1,698,594	$1,720,564	**$8,581,069**
Outpatient	664,434	858,783	1,015,846	1,396,460	987,225	**4,922,748**
Other	1,064,131	1,030,597	1,497,057	1,255,491	1,187,326	**6,034,602**
Totals	**$3,304,185**	**$3,153,333**	**$4,835,241**	**$4,350,545**	**$3,895,115**	**$19,538,419**
Average daily population	3,655	3,437	3,395	3,075	3,253	
Average per inmate	$904	$917	$1,424	$1,415	$1,197	
Chuckawalla Valley State Prison						
Inpatient	$378,968	$576,357	$899,437	$674,735	$962,816	**$3,492,313**
Outpatient	65,613	65,359	104,081	124,435	60,940	**420,428**
Other	114,689	183,386	282,513	204,619	127,351	**912,558**
Totals	**$559,270**	**$825,102**	**$1,286,031**	**$1,003,789**	**$1,151,107**	**$4,825,299**
Average daily population	3,614	3,618	3,615	3,613	3,613	
Average per inmate	$155	$228	$356	$278	$319	
Correctional Training Facility						
Inpatient	$707,936	$1,112,740	$2,433,086	$1,944,955	$2,912,043	**$9,110,760**
Outpatient	247,655	167,177	268,292	301,630	470,519	**1,455,273**
Other	342,462	437,019	615,556	567,195	715,437	**2,677,669**
Totals	**$1,298,053**	**$1,716,936**	**$3,316,934**	**$2,813,780**	**$4,097,999**	**$13,243,702**
Average daily population	7,160	7,208	7,091	5,874	6,922	
Average per inmate	$181	$238	$468	$479	$592	

Correctional Institution	Fiscal Year 1998–99	1999–2000	2000–01	2001–02	2002–03	Totals
Deuel Vocational Institution						
Inpatient	$494,950	$687,100	$857,930	$1,526,746	$1,967,666	**$5,534,392**
Outpatient	94,639	165,396	270,019	769,538	1,003,232	**2,302,824**
Other	180,129	293,816	318,656	523,068	525,013	**1,840,682**
Totals	**$769,718**	**$1,146,312**	**$1,446,605**	**$2,819,352**	**$3,495,911**	**$9,677,898**
Average daily population	3,695	3,753	3,899	3,920	3,909	
Average per inmate	$208	$305	$371	$719	$894	
Folsom State Prison						
Inpatient	$333,706	$330,057	$948,977	$1,338,373	$2,103,983	**$5,055,096**
Outpatient	55,478	100,448	217,891	335,095	866,163	**1,575,075**
Other	129,870	149,884	309,761	322,175	515,554	**1,427,244**
Totals	**$519,054**	**$580,389**	**$1,476,629**	**$1,995,643**	**$3,485,700**	**$8,057,415**
Average daily population	3,825	3,835	3,857	3,747	3,714	
Average per inmate	$136	$151	$383	$533	$939	
High Desert State Prison						
Inpatient	$1,015,362	$1,611,352	$2,285,377	$2,210,821	$2,502,016	**$9,624,928**
Outpatient	185,864	356,251	269,252	378,736	690,710	**1,880,813**
Other	404,773	438,756	497,334	489,676	514,969	**2,345,508**
Totals	**$1,605,999**	**$2,406,359**	**$3,051,963**	**$3,079,233**	**$3,707,695**	**$13,851,249**
Average daily population	4,114	4,295	4,322	4,190	4,320	
Average per inmate	$390	$560	$706	$735	$858	
Ironwood State Prison						
Inpatient	$867,336	$472,384	$851,271	$937,254	$1,294,806	**$4,423,051**
Outpatient	55,786	64,946	110,421	140,721	148,137	**520,011**
Other	169,118	240,331	313,452	335,523	250,342	**1,308,766**
Totals	**$1,092,240**	**$777,661**	**$1,275,144**	**$1,413,498**	**$1,693,285**	**$6,251,828**
Average daily population	4,342	4,595	4,565	4,588	4,564	
Average per inmate	$252	$169	$279	$308	$371	
Mule Creek State Prison						
Inpatient	$538,127	$496,329	$360,615	$764,873	$2,315,757	**$4,475,701**
Outpatient	135,170	193,214	173,093	354,434	701,206	**1,557,117**
Other	258,001	333,104	242,038	435,944	578,245	**1,847,332**
Totals	**$931,298**	**$1,022,647**	**$775,746**	**$1,555,251**	**$3,595,208**	**$7,880,150**
Average daily population	3,580	3,519	3,501	3,594	3,628	
Average per inmate	$260	$291	$222	$433	$991	
North Kern State Prison						
Inpatient	$403,297	$891,057	$771,807	$1,135,637	$1,790,938	**$4,992,736**
Outpatient	58,572	64,418	97,747	211,908	269,617	**702,262**
Other	268,680	416,561	426,437	483,803	535,896	**2,131,377**
Totals	**$730,549**	**$1,372,036**	**$1,295,991**	**$1,831,348**	**$2,596,451**	**$7,826,375**
Average daily population	4,875	4,891	4,976	4,932	5,040	
Average per inmate	$150	$281	$260	$371	$515	

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Correctional Institution	Fiscal Year 1998–99	1999–2000	2000–01	2001–02	2002–03	Totals
Northern California Women's Facility						
Inpatient	$100,025	$134,057	$192,800	$276,506	$199,022	**$902,410**
Outpatient	126,998	250,890	405,993	528,488	477,497	**1,789,866**
Other	97,950	180,811	213,895	250,741	197,368	**940,765**
Totals	**$324,973**	**$565,758**	**$812,688**	**$1,055,735**	**$873,887**	**$3,633,041**
Average daily population	765	752	755	658	409	
Average per inmate	$425	$752	$1,076	$1,604	$2,137	
Pelican Bay State Prison						
Inpatient	$467,118	$1,131,988	$1,369,042	$1,367,815	$1,116,066	**$5,452,029**
Outpatient	753,506	975,681	907,097	1,296,900	1,055,249	**4,988,433**
Other	564,240	809,179	838,696	817,287	590,029	**3,619,431**
Totals	**$1,784,864**	**$2,916,848**	**$3,114,835**	**$3,482,002**	**$2,761,344**	**$14,059,893**
Average daily population	3,363	3,372	3,293	3,283	3,278	
Average per inmate	$531	$865	$946	$1,061	$842	
Pleasant Valley State Prison						
Inpatient	$357,291	$843,159	$653,018	$1,067,531	$1,895,423	**$4,816,422**
Outpatient	114,923	72,927	155,275	226,510	455,238	**1,024,873**
Other	263,703	288,879	275,490	484,580	517,245	**1,829,897**
Totals	**$735,917**	**$1,204,965**	**$1,083,783**	**$1,778,621**	**$2,867,906**	**$7,671,192**
Average daily population	4,582	4,637	4,631	4,641	4,569	
Average per inmate	$161	$260	$234	$383	$628	
R. J. Donovan Correctional Facility						
Inpatient	$4,148,377	$3,255,606	$4,896,899	$7,766,412	$5,443,268	**$25,510,562**
Outpatient	719,782	939,037	1,543,796	1,406,826	1,541,900	**6,151,341**
Other	1,089,881	981,456	1,238,785	1,729,930	1,396,304	**6,436,356**
Totals	**$5,958,040**	**$5,176,099**	**$7,679,480**	**$10,903,168**	**$8,381,472**	**$38,098,259**
Average daily population	4,625	4,660	4,627	4,560	4,345	
Average per inmate	$1,288	$1,111	$1,660	$2,391	$1,929	
Salinas Valley State Prison						
Inpatient	$742,922	$892,711	$2,361,015	$2,235,376	$2,181,342	**$8,413,366**
Outpatient	113,199	129,921	255,251	492,521	493,547	**1,484,439**
Other	371,545	297,799	604,535	698,428	673,468	**2,645,775**
Totals	**$1,227,666**	**$1,320,431**	**$3,220,801**	**$3,426,325**	**$3,348,357**	**$12,543,580**
Average daily population	4,192	4,196	4,137	4,194	4,186	
Average per inmate	$293	$315	$779	$817	$800	
San Quentin State Prison						
Inpatient	$3,026,434	$2,147,836	$3,082,588	$3,443,055	$3,441,797	**$15,141,710**
Outpatient	484,084	617,550	293,561	651,122	1,178,368	**3,224,685**
Other	615,208	722,921	603,201	669,598	721,714	**3,332,642**
Totals	**$4,125,726**	**$3,488,307**	**$3,979,350**	**$4,763,775**	**$5,341,879**	**$21,699,037**
Average daily population	5,874	5,824	5,757	5,625	5,737	
Average per inmate	$702	$599	$691	$847	$931	

Correctional Institution	Fiscal Year 1998–99	1999–2000	2000–01	2001–02	2002–03	Totals
Sierra Conservation Center						
Inpatient	$669,931	$578,522	$796,349	$971,362	$837,288	**$3,853,452**
Outpatient	330,309	549,974	679,212	839,258	724,051	**3,122,804**
Other	427,980	552,816	650,176	686,660	459,895	**2,777,527**
Totals	**$1,428,220**	**$1,681,312**	**$2,125,737**	**$2,497,280**	**$2,021,234**	**$9,753,783**
Average daily population	6,288	6,325	6,329	6,327	6,332	
Average per inmate	$227	$266	$336	$395	$319	
Valley State Prison for Women						
Inpatient	$1,122,280	$1,700,813	$1,458,608	$2,223,804	$2,018,798	**$8,524,303**
Outpatient	390,576	597,467	809,648	1,117,397	901,180	**3,816,268**
Other	920,587	1,268,324	1,361,191	1,868,355	1,721,434	**7,139,891**
Totals	**$2,433,443**	**$3,566,604**	**$3,629,447**	**$5,209,556**	**$4,641,412**	**$19,480,462**
Average daily population	3,650	3,578	3,355	3,043	3,262	
Average per inmate	$667	$997	$1,082	$1,712	$1,423	
Wasco State Prison						
Inpatient	$695,839	$1,299,084	$1,966,173	$2,153,081	$1,906,378	**$8,020,555**
Outpatient	46,261	75,395	213,543	318,407	429,004	**1,082,610**
Other	354,529	543,488	844,823	912,196	709,293	**3,364,329**
Totals	**$1,096,629**	**$1,917,967**	**$3,024,539**	**$3,383,684**	**$3,044,675**	**$12,467,494**
Average daily population	5,837	5,692	5,799	5,734	5,989	
Average per inmate	$188	$337	$522	$590	$508	
All Institutions						
Inpatient*	$33,569,388	$35,609,721	$50,753,451	$60,447,874	$72,106,564	**$252,486,998**
Outpatient*	7,059,366	8,879,339	11,429,336	16,176,708	19,797,333	**63,342,082**
Other	12,540,994	13,660,893	17,724,524	20,684,786	20,678,456	**85,289,653**
Totals	**$53,169,748**	**$58,149,953**	**$79,907,311**	**$97,309,368**	**$112,582,353**	**$401,118,733**
Totals average daily population	**150,583**	**151,823**	**151,484**	**148,316**	**150,601**	
Totals average per inmate	**$353**	**$383**	**$527**	**$656**	**$748**	

Sources: California Department of Corrections' (Corrections) health care cost and utilization program database; Corrections' Estimates and Statistical Analysis Section, Offender Information Services Branch.

* The total inpatient and outpatient payments do not agree with the respective total payments presented in Tables 2, 3, B.1, and B.2 because we excluded from our price-volume analyses those inpatient payment records for which Corrections did not enter a community hospital inpatient admission number and those outpatient payment records for which Corrections did not enter a community hospital outpatient number. We used the community hospital inpatient admission numbers and outpatient numbers to identify inpatient admissions and outpatient visits for the purpose of calculating the average payment for each inpatient stay or outpatient visit.

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APPENDIX B

Price-Volume Analysis of Hospital Payments Made by Correctional Institutions

We conducted a price-volume analysis to determine the extent to which the overall increase in hospital payments for inpatient and outpatient services was the result of an increase in the average amount paid for each hospital inpatient admittance or outpatient visit and the extent to which the increase was the result of a greater number of hospital admittances or visits. Using the California Department of Corrections' (Corrections) separate payment data for inpatient and outpatient services, we identified the numbers of hospital admittances or visits and the associated payments made to hospitals in fiscal years 1998–99 and 2002–03 for each of the 33 correctional institutions in California.[12] We determined an average payment for each admittance or visit for each fiscal year and calculated the increase in the average amount paid. We multiplied the increase in average payment between fiscal years 1998–99 and 2002–03 by the number of hospital admittances or visits in fiscal year 2002–03 to determine the increase in hospital payments associated with the increase in the average amount paid for hospital admittances or visits. To determine the increase in hospital payments due to more admittances or visits, we multiplied the increase in the number of hospital admittances or visits between fiscal years 1998–99 and 2002–03 by the average amount paid for each admittance or visit in fiscal year 1998–99.

As Table B.1 beginning on page 85 shows, overall payments for hospital inpatient services increased by more than $38 million between fiscal years 1998–99 and 2002–03. The results of our price-volume analysis showed that of that amount, roughly $27 million (71 percent) was caused by an increase in the average amount paid for each hospital inpatient admittance. However, the amounts and the reasons for the increase varied by institution. For example, the California Substance Abuse Treatment Facility at Corcoran had the highest dollar increases at $3.7 million, of which $3.3 million (90 percent) was due

[12] Although California currently has 32 adult correctional institutions, 33 institutions were counted in this audit because the Northern California Women's Facility made payments for hospital services during fiscal year 2002–03 but was deactivated early in 2003.

to an increase in the facility's average amount paid for each hospital inpatient admittance. In contrast, the R. J. Donovan Correctional Facility had the second highest dollar increase at about $3.5 million, yet nearly $1.9 million of its total increase (53 percent) was due to an increase in the number of hospital inpatient admittances.

Table B.2 on page 87 shows that overall payments for hospital outpatient services increased by roughly $13 million between fiscal years 1998–99 and 2002–03. According to our price-volume analysis, nearly $7 million (54 percent) of that amount was caused by an increase in the average amount paid for each outpatient visit, whereas nearly $6 million (46 percent) was caused by an increase in the number of hospital outpatient visits. As was the case with hospital inpatient services, the amount of the increase and the reasons for the increase varied by institution. For example, Deuel Vocational Institution had a total dollar increase of $909,000, of which $635,000 (70 percent) was due to an increase in the average amount paid for hospital outpatient services. However, California State Prison, Sacramento, had a total dollar increase of about $586,000, of which $506,000 (86 percent) was due to an increase in the number of hospital outpatient visits.

The Audit Results section of the report discusses the conclusions from our price-volume analysis.

TABLE B.1

Price-Volume Analysis of Correctional Institutions' Inpatient Hospital Payments

Facility	Fiscal Year 1998–99 Payments	Fiscal Year 1998–99 Number of Admittances	Fiscal Year 1998–99 Average Payment Per Admittance	Fiscal Year 2002–03 Payments	Fiscal Year 2002–03 Number of Admittances	Fiscal Year 2002–03 Average Payment Per Admittance	Increase (Decrease) in Payments	Increase (Decrease) in Number of Admittances	Increase (Decrease) in Average Payment Per Admittance	Increase (Decrease) in Payments Due to Number of Admittances	Percentage Increase (Decrease) Due to Number of Admittances	Increase (Decrease) in Payments Due to Average Payment Per Admittance	Percentage Increase (Decrease) Due to Average Payment Per Admittance
California Substance Abuse Treatment Facility at Corcoran	$649,089	158	$4,108	$4,346,943	249	$17,458	$3,697,854	91	$13,350	$373,842	10.1%	$3,324,012	89.9%
R. J. Donovan Correctional Facility*	1,796,559	197	9,120	5,325,057	403	13,214	3,528,498	206	4,094	1,878,635	53.2	1,649,863	46.8
Correctional Training Facility*	711,104	77	9,235	2,912,043	137	21,256	2,200,939	60	12,021	554,107	25.2	1,646,832	74.8
California State Prison, Solano	947,082	79	11,988	2,978,305	135	22,062	2,031,223	56	10,074	671,349	33.1	1,359,874	66.9
California Medical Facility*	3,300,893	186	17,747	5,186,988	208	24,937	1,886,095	22	7,190	390,428	20.7	1,495,667	79.3
Mule Creek State Prison	538,127	75	7,175	2,315,757	105	22,055	1,777,630	30	14,880	215,251	12.1	1,562,379	87.9
Folsom State Prison	333,706	32	10,428	2,103,983	113	18,619	1,770,277	81	8,191	844,693	47.7	925,584	52.3
California State Prison, Corcoran*	792,792	120	6,607	2,424,270	178	13,619	1,631,478	58	7,012	383,183	23.5	1,248,295	76.5
Pleasant Valley State Prison	357,291	67	5,333	1,895,423	139	13,636	1,538,132	72	8,303	383,955	25.0	1,154,177	75.0
High Desert State Prison	1,015,362	49	20,722	2,502,016	80	31,275	1,486,654	31	10,553	642,372	43.2	844,282	56.8
Deuel Vocational Institution	494,950	95	5,210	1,967,666	262	7,510	1,472,716	167	2,300	870,070	59.1	602,646	40.9
California State Prison, Sacramento	715,432	68	10,521	2,174,535	118	18,428	1,459,103	50	7,907	526,053	36.1	933,050	63.9
Salinas Valley State Prison*	749,257	72	10,406	2,181,342	93	23,455	1,432,085	21	13,049	218,533	15.3	1,213,552	84.7
North Kern State Prison*	409,507	98	4,179	1,790,938	147	12,183	1,381,431	49	8,004	204,753	14.8	1,176,678	85.2
Wasco State Prison	695,839	169	4,117	1,906,378	237	8,044	1,210,539	68	3,927	279,983	23.1	930,556	76.9
Avenal State Prison*	830,737	140	5,934	2,036,693	186	10,950	1,205,956	46	5,016	272,956	22.6	933,000	77.4
California State Prison, Los Angeles County	536,766	91	5,899	1,704,943	119	14,327	1,168,177	28	8,428	165,159	14.1	1,003,018	85.9
California Men's Colony*	1,109,416	126	8,805	2,244,653	149	15,065	1,135,237	23	6,260	202,512	17.8	932,725	82.2
Calipatria State Prison*	1,212,506	92	13,179	2,231,355	121	18,441	1,018,849	29	5,262	382,203	37.5	636,646	62.5
Valley State Prison for Women	1,122,280	367	3,058	2,018,798	404	4,997	896,518	37	1,939	113,145	12.6	783,373	87.4
California Correctional Center	1,274,722	63	20,234	2,100,692	102	20,595	825,970	39	361	789,114	95.5	36,856	4.5
Pelican Bay State Prison*	517,303	70	7,390	1,116,066	78	14,309	598,763	8	6,919	59,120	9.9	539,643	90.1
Centinela State Prison*	656,216	69	9,510	1,250,151	90	13,891	593,935	21	4,381	199,718	33.6	394,217	66.4
Chuckawalla Valley State Prison	378,968	47	8,063	962,816	87	11,067	583,848	40	3,004	322,526	55.2	261,322	44.8

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Facility	Fiscal Year 1998–99 Payments	Fiscal Year 1998–99 Number of Admittances	Fiscal Year 1998–99 Average Payment Per Admittance	Fiscal Year 2002–03 Payments	Fiscal Year 2002–03 Number of Admittances	Fiscal Year 2002–03 Average Payment Per Admittance	Increase (Decrease) in Payments	Increase (Decrease) in Number of Admittances	Increase (Decrease) in Average Payment Per Admittance	Increase (Decrease) in Payments Due to Number of Admittances	Percentage Increase (Decrease) Due to Number of Admittances	Increase (Decrease) in Payments Due to Average Payment Per Admittance	Percentage Increase (Decrease) Due to Average Payment Per Admittance
San Quentin State Prison	$3,026,434	297	$10,190	$3,441,797	178	$19,336	$415,363	(119)	$9,146	($1,212,612)	-291.9%	$1,627,975	391.9%
Ironwood State Prison*	880,973	79	11,152	1,294,806	115	11,259	413,833	36	107	401,456	97.0	12,377	3.0
California Institution for Men	2,955,391	224	13,194	3,205,368	281	11,407	249,977	57	(1,787)	752,041	300.8	(502,064)	-200.8
California Institution for Women	1,653,914	233	7,098	1,891,184	280	6,754	237,270	47	(344)	333,622	140.6	(96,352)	-40.6
Sierra Conservation Center*	669,931	143	4,685	843,407	97	8,695	173,476	(46)	4,010	(215,502)	-124.2	388,978	224.2
California Correctional Institution*	724,518	110	6,587	872,919	95	9,189	148,401	(15)	2,602	(98,798)	-66.6	247,199	166.6
Central California Women's Facility	1,575,620	223	7,066	1,720,564	224	7,681	144,944	1	615	7,066	4.9	137,878	95.1
Northern California Women's Facility	100,025	36	2,778	199,022	43	4,628	98,997	7	1,850	19,449	19.6	79,548	80.4
California Rehabilitation Center	829,988	92	9,022	796,377	109	7,306	(33,611)	17	(1,716)	153,367	-456.3	(186,978)	556.3
Totals†	**$33,562,698**	**4,044**		**$71,943,255**	**5,362**		**$38,380,557**	**1,318**		**$11,083,749**		**$27,296,808**	

Source: California Department of Corrections' (Corrections) health care cost and utilization program database.

* The R. J. Donovan Correctional Facility (Donovan) informed us that prior to the end of fiscal year 2001–02, it had made hospital payments for other institutions. However, there are occasions when Donovan still makes hospital payments for other institutions. Therefore, we adjusted the data for Donovan and the noted institutions to properly reflect payments for inmates from their respective institutions.

† We performed this analysis for each of the correctional institutions and summed the results for the aggregate analysis shown in Table 2 of this report. The total inpatient payments do not agree with the total payments presented in Appendix A by approximately $160,000 because we excluded from our price-volume analysis those payment records for which Corrections did not enter a community hospital inpatient admission number. We used the community hospital inpatient admission number to identify inpatient admissions for the purpose of calculating Corrections' average payment for inpatient stays.

TABLE B.2

Price-Volume Analysis of Correctional Institutions' Outpatient Hospital Payments

Facility	Fiscal Year 1998–99 Payments	Fiscal Year 1998–99 Number of Visits	Fiscal Year 1998–99 Average Payment Per Visit	Fiscal Year 2002–03 Payments	Fiscal Year 2002–03 Number of Visits	Fiscal Year 2002–03 Average Payment Per Visit	Increase (Decrease) in Payments	Increase (Decrease) in Number of Visits	Increase (Decrease) in Average Payment Per Visit	Increase (Decrease) in Payments Due to Number of Visits	Percentage Increase (Decrease) Due to Number of Visits	Increase (Decrease) in Payments Due to Average Payment Per Visit	Percentage Increase (Decrease) Due to Average Payment Per Visit
California Substance Abuse Treatment Facility at Corcoran	$111,715	309	$ 362	$1,059,073	900	$1,177	$947,358	591	$ 815	$213,669	22.6%	$733,689	77.4%
R. J. Donovan Correctional Facility*	620,824	543	1,143	1,541,900	778	1,982	921,076	235	839	268,681	29.2	652,395	70.8
Deuel Vocational Institution	94,639	137	691	1,003,232	533	1,882	908,593	396	1,191	273,555	30.1	635,038	69.9
Folsom State Prison	55,478	125	444	866,163	868	998	810,685	743	554	329,764	40.7	480,921	59.3
San Quentin State Prison	484,084	230	2,105	1,180,437	309	3,820	696,353	79	1,715	166,272	23.9	530,081	76.1
California State Prison, Corcoran*	144,446	236	612	728,169	610	1,194	583,723	374	582	228,910	39.2	354,813	60.8
California State Prison, Sacramento	153,942	147	1,047	739,467	630	1,174	585,525	483	127	505,809	86.4	79,716	13.6
California Correctional Center	230,251	207	1,112	796,948	379	2,103	566,697	172	991	191,319	33.8	375,378	66.2
Mule Creek State Prison	135,170	215	629	701,206	652	1,075	566,036	437	446	274,741	48.5	291,295	51.5
Valley State Prison for Women	390,576	358	1,091	901,180	846	1,065	510,604	488	(26)	532,405	104.3	(21,801)	-4.3
High Desert State Prison	185,864	145	1,282	690,710	208	3,321	504,846	63	2,039	80,755	16.0	424,091	84.0
Avenal State Prison*	166,813	220	758	617,616	463	1,334	450,803	243	576	184,253	40.9	266,550	59.1
Sierra Conservation Center	328,729	643	511	724,051	702	1,031	395,322	59	520	30,163	7.6	365,159	92.4
Wasco State Prison	46,261	112	413	429,004	383	1,120	382,743	271	707	111,935	29.2	270,808	70.8
Salinas Valley State Prison	113,199	178	636	493,547	449	1,099	380,348	271	463	172,342	45.3	208,006	54.7
Northern California Women's Facility	126,998	493	258	477,497	569	839	350,499	76	581	19,578	5.6	330,921	94.4
Pleasant Valley State Prison	114,923	165	697	455,238	556	819	340,315	391	122	272,333	80.0	67,982	20.0
California State Prison, Solano	83,542	58	1,440	404,446	327	1,237	320,904	269	(203)	387,462	120.7	(66,558)	-20.7
California Men's Colony	326,394	204	1,600	642,172	308	2,085	315,778	104	485	166,397	52.7	149,381	47.3
Pelican Bay State Prison	753,506	507	1,486	1,055,249	544	1,940	301,743	37	454	54,990	18.2	246,753	81.8
Central California Women's Facility	664,434	545	1,219	915,010	802	1,141	250,576	257	(78)	313,320	125.0	(62,744)	-25.0
California Correctional Institution*	72,162	144	501	291,029	395	737	218,867	251	236	125,783	57.5	93,084	42.5
Correctional Training Facility	247,655	274	904	470,519	421	1,118	222,864	147	214	132,866	59.6	89,998	40.4
North Kern State Prison	58,572	85	689	269,617	209	1,290	211,045	124	601	85,446	40.5	125,599	59.5
California Medical Facility*	494,702	289	1,712	643,292	292	2,203	148,590	3	491	5,135	3.5	143,455	96.5
California State Prison, Los Angeles County*	100,245	327	307	276,367	549	503	176,122	222	196	68,056	38.6	108,066	61.4

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Facility	Fiscal Year 1998–99 Payments	Fiscal Year 1998–99 Number of Visits	Fiscal Year 1998–99 Average Payment Per Visit	Fiscal Year 2002–03 Payments	Fiscal Year 2002–03 Number of Visits	Fiscal Year 2002–03 Average Payment Per Visit	Increase (Decrease) in Payments	Increase (Decrease) in Number of Visits	Increase (Decrease) in Average Payment Per Visit	Increase (Decrease) in Payments Due to Number of Visits	Percentage Increase (Decrease) Due to Number of Visits	Increase (Decrease) in Payments Due to Average Payment Per Visit	Percentage Increase (Decrease) Due to Average Payment Per Visit
Calipatria State Prison*	$228,814	139	$1,646	$401,284	287	$1,398	$172,470	148	($248)	$243,629	141.3%	($71,159)	-41.3%
Centinela State Prison*	271,654	212	1,281	435,395	289	1,507	163,741	77	226	98,667	60.3	65,074	39.7
California Institution for Women	62,674	82	764	216,220	459	471	153,546	377	(293)	288,148	187.7	(134,602)	-87.7
Ironwood State Prison	55,786	74	754	148,137	115	1,288	92,351	41	534	30,908	33.5	61,443	66.5
California Institution for Men	57,478	43	1,337	73,944	39	1,896	16,466	(4)	559	(5,347)	-32.5	21,813	132.5
California Rehabilitation Center	10,642	15	709	17,201	13	1,323	6,559	(2)	614	(1,419)	-21.6	7,978	121.6
Chuckawalla Valley State Prison	65,613	86	763	60,940	39	1,563	(4,673)	(47)	800	(35,858)	767.3	31,185	-667.3
Totals†	**$7,057,785**	**7,547**		**$19,726,260**	**14,923**		**$12,668,475**	**7,376**		**$5,814,667**		**$6,853,808**	

Source: California Department of Corrections' (Corrections) health care cost and utilization program database.

* The R. J. Donovan Correctional Facility (Donovan) informed us that prior to the end of fiscal year 2001–02, it had made hospital payments for other institutions. However, there are occasions when Donovan still makes hospital payments for other institutions. Therefore, we adjusted the data for Donovan and the noted institutions to properly reflect payments for inmates from their respective institutions.

† We performed this analysis for each of the correctional institutions and summed the results for the aggregate analysis shown in Table 3 of this report. The total outpatient payments do no agree with the total payments presented in Appendix A by approximately $70,000 because we excluded from our price-volume analysis those payment records for which Corrections did not enter a community hospital outpatient number. We used the community hospital outpatient number to identify outpatient visits for the purpose of calculating Corrections' average payment for outpatient visits.

Agency's comments provided as text only.

Youth and Adult Correctional Agency
1515 K Street, Suite 520
Sacramento, CA 95814

July 8, 2004

Ms. Elaine Howle
State Auditor
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, California 95814

Dear Ms. Howle:

Thank you for the opportunity to review and comment on the draft of your recent audit titled, "California Department of Corrections: *More Expensive Hospital Services and Greater Use of Hospital Facilities Have Driven the Rapid Rise in Contract Payments for Inpatient and Outpatient Care.*" We are forwarding the enclosed memorandum prepared by the California Department of Corrections (CDC) as our response to the draft audit.

In our efforts to continually improve all aspects of the CDC's health care services delivery system, we welcome the independent review and recommendations provided by the Bureau of State Audits. We look forward to providing you with periodic updates that document our continued efforts to improve our ability to negotiate contracts and expand data collection and analysis efforts.

If you have any questions or wish to discuss my responses or recommendations, please contact me at 323-6001.

Continued Success,

(Signed by: Roderick Q. Hickman)

RODERICK Q. HICKMAN
Secretary
Youth and Adult Correctional Agency

Enclosures

State of California Department of Corrections

Memorandum

Date:

To: Roderick Q. Hickman, Secretary
Youth and Adult Correctional Agency
1515 K Street, Suite 520
Sacramento, CA 95814

SUBJECT: BUREAU OF STATE AUDITS' DRAFT REPORT "CALIFORNIA DEPARTMENT OF CORRECTIONS: MORE EXPENSIVE HOSPITAL SERVICES AND GREATER USE OF HOSPITAL FACILITIES HAVE DRIVEN THE RAPID RISE IN CONTRACT PAYMENTS FOR INPATIENT AND OUTPATIENT CARE"

The California Department of Corrections (CDC) has reviewed the Bureau of State Audits' Report titled, "California Department of Corrections: *More Expensive Hospital Services and Greater Use of Hospital Facilities Have Driven the Rapid Rise in Contract Payments for Inpatient and Outpatient Care*".

The CDC wishes to express its appreciation for the time and effort of the auditors dedicated to this review. The recommendations, as presented, will help guide the Department with future management decisions regarding inpatient and outpatient care for our inmates.

As recommended, the CDC will explore methods of standardizing and improving its data collection to ensure an understanding of the rising trends in inpatient and outpatient hospital payments. CDC will also review all hospital contract rate provisions and continue to consult with other state agencies to ensure effective negotiation strategies and reduced hospital expenditures.

As noted in the response, the Health Care Services Division (HCSD) collects its data on an ACCESS database. This program has very limited abilities and presents daily challenges when trying to extract information. To ensure the Department is providing appropriate, economical managed care, the HCSD is exploring the ability to contract with a vendor to process medical invoices and provide a data infrastructure to collect the required medical information, which would allow the HCSD analysts to perform the analysis the BSA recommends.

The HCSD, has, or will be accomplishing the following to assist in better managing the medical, as well as the fiscal, programs of the Division:

- Benchmark contract rates in concert with the Office of Statewide Health and Policy Development and the Department of Health Services.
- Develop the Utilization Management database to determine the specific reasons for changes in utilization patterns and identify whether services are medically necessary.

- Fill vacant Health Care Cost and Utilization Program positions and begin hiring for the proposed new positions identified in the FY 2004/05 May Revision if approved in the State's budget.
- Develop new policies and procedures in the Health Contracts Unit to ensure effective negotiations for inpatient and outpatient services.

As the report clearly indicates, there are areas where CDC can improve its practices. We will continue to report our progress on the recommendations made by the Bureau of State Audits. If you have any questions regarding the attached response, please contact me at (916) 445-7688.

(Signed by: J. S. Woodford)

J. S. WOODFORD
Director

Attachment

RESPONSE TO THE JULY 1, 2004
BUREAU OF STATE AUDITS' DRAFT REPORT "*CALIFORNIA DEPARTMENT OF CORRECTIONS: MORE EXPENSIVE HOSPITAL SERVICES AND GREATER USE OF HOSPITAL FACILITIES HAVE DRIVEN THE RAPID RISE IN CONTRACT PAYMENTS FOR INPATIENT AND OUTPATIENT CARE*"

To ensure Corrections understands the reasons behind the rising trend in its inpatient and outpatient hospital payments, it should do the following:

- ***Enter complete and accurate hospital billing and medical procedures data in its HCCUP database for subsequent comparison and analysis by HCSD and correctional institutions of the medical procedures that hospitals are performing and their associated costs.***

  The California Department of Corrections (CDC) agrees with the recommendation stated above. Hospitals follow the standards of ethical coding regulations and procedures guidelines outlined by the American Health Information Management Association. Therefore, where coding is appropriate for procedures, the Health Care Cost and Utilization Program (HCCUP) staff will continue to manually enter the invoice information into the database prior to payment. Omission of appropriate coding will be disputed for payment. The CDC recognizes the importance of data entry and will develop a quality control process, which will ensure data integrity.

- ***Perform regular analysis of its health care cost and utilization data, monitor its hospital payment trends, and investigate fully the reasons why its costs are rising for the purpose of implementing cost containment measures.***

  The CDC agrees with the recommendation as stated above. Since fiscal year (FY) 1997/98, HCCUP data entry has increased by 89 percent with no additional resources. Recognizing the need to perform trend analysis and investigate reasons for cost increases, the administration included additional HCCUP resources in the FY 2004/05 Governor's Budget. With this augmentation, the Health Care Services Division will identify any additional data elements and/or validation reports to be added to the database; develop standard reports for the identification of outlier utilization; develop standardized trend reports specific to potential cost drivers; establish a process of reporting and tracking response to outlier utilization information provided to management, etc. This review and reporting will occur on a quarterly basis. Additionally, the CDC will explore methods of standardizing and improving its data collection and analysis efforts within the parameters of its existing resources.

  It should be noted that, within the last year, changes have been made to HCSD's periodic review of cost and utilization data and now includes analyses performed by Health Care Services Division's fiscal staff. These staff will be reviewing HCCUP utilization and expenditure data each month as part of the Department's Monthly Budget Plan process. This change will increase the HCSD's ability to detect increases in costs and implement cost containment measures.

Within the next six months, HCCUP's cost and basic utilization data will be augmented by detailed clinical data (not currently available in the HCCUP database) acquired from the newly implemented Utilization Management (UM) database. This will increase HCSD's ability to compare and analyze cost and utilization data and to quantify concerns such as why increased utilization has occurred.

- ***Investigate the significant and sudden increase in its inpatient hospital payments, beginning in fiscal year 2000-01, for the purpose of determining whether renegotiated contract payment rates, reducing the length of stay in contract hospital beds, or other cost containment measures can most effectively reduce contract hospital rates.***

The CDC agrees, in part, with the recommendation as stated above. While we recognize that it is useful to review historic data from this period, the CDC plans to focus its review on FY 2002/03 and FY 2003/04 as it relates to the average length of stay as the data for these periods is more robust and complete and are relative to current contract processes. We will perform a contract review to determine what provisions were advantageous to the State based on negotiated rates and utilization patterns. We believe this is the best use of our available resources.

The HCU is in the process of compiling a report identifying all hospital contract rate provisions. Utilizing this report, the HCU will obtain data from HCCUP to analyze the impact of utilization, current rates, and stop-loss provisions. Contracts with a percent discount from billed charges will be analyzed to identify increases to charge masters (e.g., usual and customary billing rates) during the fiscal year. An ongoing analysis, utilizing statewide HCCUP expenditure data, will be developed to compare rate structures with Medicare and Medi-Cal rates.

To complete a valid case-to-case comparison, this analysis requires clinical data that, until recently, was unavailable in easily accessible database format. Although HCCUP data includes diagnostic and procedural data along with cost and utilization data, the aforementioned data was generally limited to primary diagnoses and procedures only, making it difficult to determine why patients with similar case profiles varied in cost. To get to the required level of detail, such analysis previously required manual clinical review of the patient case files. The pending combination of HCCUP and UM data will significantly enhance HCSD's ability to perform this type of analysis.

The HCSD is currently implementing a detailed contract database, which in the near future will also be connected to the HCCUP/UM database, which will further enhance HCSD's ability to complete the recommended analysis.

- ***Complete its analysis of high-cost cases to determine why the number of high-cost inpatient cases and more expensive outpatient visits are rising so that it can identify cost-effective solutions to its increasing health care costs. For example, Corrections should fully investigate the extent to which each of the potential cost drivers it has identified as part of its analysis if its high-cost inpatient cases is increasing its hospital inpatient costs.***

  The CDC agrees with the recommendation as stated above. The HCSD has completed a preliminary analysis of this matter and has made some progress in developing a multivariate cost model. The model, at this time, is limited to HCCUP data, and as such lacks clinical data needed to adequately compare cases within the broad diagnostic categories captured by HCCUP.

  The HCSD will augment the Monthly Budget Plan with the monthly Utilization Management case review report as a first step towards understanding the causation between high cost cases and increased expenditure. Status will be provided in the 60-Day Response to this audit on the implementation plan of this process. Further, in the next six months the HCSD will strive to create a better expenditure model by combining HCCUP and UM datasets into a single database, thus capturing detailed expenditure data with detailed clinical data in a single system. This will be augmented with data captured by the contract-tracking database, which is currently being developed.

- ***Follow up with other institutions using new hospital contracts to determine if re-negotiated contract payment terms are resulting in significantly higher costs for other institutions as well, similar to the two that informed us of the significant effect on their inpatient hospital costs for high-cost cases.***

  The CDC agrees with the recommendation as stated above. The CDC will perform an analysis of cost and utilization data associated with two existing hospital contracts--one new and one recently amended to determine if renegotiated contract payment terms are resulting in significantly higher costs for other institutions within the next six months. During the next six months, the HCU will follow up with all of the institutions participating in the use of the new preferred provider hospital contracts.

To ensure Corrections adequately controls rising inpatient and outpatient hospital payments due to contract payment provisions, it should do the following:

- ***Revisit hospital contract provisions that pay a discount on the hospital billed charges and consider renegotiating these contract terms based on hospital costs rather than hospital charges. This would include hospital contract provisions that require it to pay a percentage of hospitals' billed charges for outpatient visits, including emergency room outpatient visits. Either use existing cost-based benchmarks such as Medicare or Medi-Cal rates, or use hospital cost-to-charge ratios to estimate hospital costs and negotiate contract rates from those costs. Further, should Corrections renegotiate hospital contract payment terms, it should perform subsequent analysis to quantify and track the realized savings or increased costs resulting from each renegotiated contract.***

  The CDC agrees with the recommendation as stated above. The Health Contract Unit (HCU) is in the process of compiling a report identifying all hospital contract rate provisions. Utilizing this report, the HCU will obtain data from HCCUP to analyze the impact of utilization, current rates, and stop-loss provisions. Contracts with a percent discount from billed charges will be analyzed to identify increases to charge masters during the fiscal year. During the next six months, an

ongoing analysis, utilizing statewide HCCUP expenditure data, will be developed to compare rate structures with Medicare and Medi-Cal rates. The HCU will continue consulting with other state agencies, including the Department of Health Services (DHS), the California Medical Assistance Commission, and the Office of Statewide Health Planning and Development (OSHPD) to determine each hospital's cost-to-charge ratios in order to estimate hospital costs that will be used to establish benchmark rates for the purpose of negotiations. The HCU is currently reviewing OSHPD data for each hospital rate approval. Within the next year, the HCU will identify contracts requiring renegotiation and begin the renegotiation process. The criteria for renegotiation will be directed towards contracts with high utilization that contains stop loss provisions and low percent discounts from billed charges. The HCU is performing complete analysis of all new and renewed hospital contracts that includes comparing HCCUP's utilization data and HCCUP invoice data with OSHPD data, and comparisons with other hospitals within the state providing the same service.

- ***Obtain and maintain updated cost-to-charge ratios for each contracted hospital, using data from the Centers for Medicare and Medicaid Services, the Department of Health Services, or the Office of Statewide Health Planning and Development. It should use these ratios to calculate estimated hospital costs for use as a tool in contract negotiations with hospitals and for monitoring the reasonableness of payments to hospitals.***

  The CDC agrees with the recommendation as stated above. The HCU will continue consulting with other state agencies to identify each hospital's cost-to-charge ratios in order to estimate hospital costs and use these rates as a benchmark for negotiations. As indicated in CDC's response to the BSA questions of June 4, 2004, the CDC is in the process of working with DHS to establish legislative language for an appropriate reimbursement structure and process. This structure would be based on established Medicare and Medicaid reimbursement rates. Additionally, the HCU has begun to routinely utilize OSHPD data when analyzing hospital contract rate proposals. To reduce medical contract expenditures, the HCU will perform major hospital solicitations in several locations during the next fiscal year, will continue to explore rate benchmarking, and will perform effective negotiations practices.

- ***Require hospitals to include DRG codes on invoices they submit for inpatient services to help provide a standard, along with hospital charges, by which to measure its payments to hospitals as well as case complexity.***

  The CDC agrees, in part, that the Diagnostic Related Groups (DRG) information would be helpful to measure payments to hospitals and measure case complexity. However, the complexity of the DRG system doesn't allow for a standard format for means of comparative treatment and cost. For example, two patients may have the same DRG, but both cases will not include the same or all of the diagnoses or procedures included in that DRG. DRG 116 includes a cardiovascular procedure for insertion of a pacemaker. It also includes the cardiovascular procedure for Percutaneous Transluminal Coronary Angioplasty (PTCA). These two are significantly different in performance of the procedure and in cost. Additionally, the DRGs are reviewed, and additions, deletions, and changes are made annually. In 2002, DRG 112 was deleted and the diagnosis and procedural codes were moved to three different DRGs (116, 517, and 518). When CDC did a cursory review of the DRGs for FY 2002/03, data showed that the procedure code for PTCA (36.01) along with the same ICD-9-CM Diagnostic code for Coronary Atherosclerosis (414.01) could be found listed in different DRGs (116 and 518). The service was performed at different hospitals. Therefore, utilizing the DRG

code alone, one cannot perform the review and analysis for comparative purposes. Thus, this data will be but one component of our analysis.

Within the next 60 days, CDC will update their hospital contract boilerplate language for new contracts to include submission of the DRG on all inpatient admissions on the hospital billing form (UB-92). Within the next year, CDC will also amend current contracts, which will not expire within the next six months, to include the same language. The pending combination of HCCUP and UM data will significantly enhance HCSD's ability to perform this type of analysis. The CDC is exploring the ability to contract with a vendor to process medical invoices and provide a data infrastructure to collect the required medical data, which would allow the HCSD analysts to perform the analyses the BSA recommends. However, we are currently limited to the constraints of manual data entry and the building of additional validations into our current ACCESS databases.

- ***Detect abuses of contractual stop-loss provisions, by monitoring the volume and total amounts of payments made under stop-loss provisions, which are intended to protect hospitals from financial loss in exceptional cases, not to become a common method of payment.***

The CDC agrees with this recommendation as stated above. The HCU continues to explore methods to reduce and eliminate the usage of stop-loss in the hospital contracts. The HCU will perform an ongoing analysis utilizing HCCUP invoicing data to demonstrate the number of times in a fiscal year the stop loss prevailed. If the analysis demonstrates a significant number of claims reimbursed at the stop loss provision, the analysis may be expanded to identify each encounter defining the acuity of the patient's condition, the length of stay or if the hospital's charge master structure accounts for the high cost. Further analysis may be required to identify if the hospital's charge master significantly increased from the onset of the contract.

Additionally, the CDC will perform audits of those contracts with stop-loss provisions.

- ***Include in its utilization management quality control process a review of how utilization management medical staff assess and determine medical necessity, appropriateness of treatment, and need for continued hospital stays.***

The CDC agrees with this recommendation. The UM is a strategy designed to ensure that health care expenditures are restricted to those that are medically necessary and delivered on a timely basis at the most appropriate and resource efficient level. The use of community criteria provides CDC with a thorough, current, clinically relevant and objective basis for ensuring a standardized and consistent application. Examples of CDC approved guideline criteria include, healthcare criteria developed by licensed physicians, Milliman Care Guidelines, health care policies and procedures and program guidelines. Acquisition of InterQual care guidelines is also underway.

The CDC UM Program applies prospective, concurrent, and retrospective examination of health care service requests and service delivery. The data gathered allows for analysis, trending and planning of health care needs. The Department recognizes the need for quality control, and as such, began with instruction via a mandatory statewide videoconference on the UM Program in December 2003. The training was directed to physicians and nurses as well as other classifications. The training included all elements of the program's focuses, target areas, roles and responsibilities. In addition, HCSD UM staff have begun monitoring and performing assessments of compliance with the UM processes.

Within the upcoming months, a quality control process will be developed. This process will include monthly audits of a sample of reviews performed by UM staff. The data reviewed will include the site of service delivery for quality and cost containment measures.

- ***Continue with its plan to analyze how mentally ill inmates are affecting institution inpatient costs and utilization.***

The CDC agrees with the recommendation as stated above. In order to complete such an analysis, data from currently disparate systems will need to be merged into a single data repository, thus we will strive to connect the UM, HCCUP, and Health Care Placement Unit (HCPU) data in the near future. Currently, no single piece can be used to adequately answer this question.

The HCSD has collected data regarding occupancy rates for its internal bed utilization. On a daily basis inmates are transported to various CDC licensed facilities to accommodate those patients who cannot be cared for in a community setting. The need for inpatient CDC beds has been realized and funding and construction of a 50-bed mental health crisis facility is underway. In addition, the CDC is contracting with the Department of Mental Health for 25 acute inpatient psychiatric beds at Atascadero State Hospital to provide crisis beds for the California Men's Colony, one of the CDC's largest mental health facilities that currently has no on site licensed mental health beds. In June 2005 Delano II will open with 25 Correctional Treatment Center (CTC) beds and the California Institution for Women will open its 20-bed CTC facility in the spring of 2005 as well. Additionally, future CDC mental health licensed beds are being considered under the mental health facility study currently under way. It is expected that these new licensed beds will provide the necessary relief to allow the medical patients to be accommodated, as appropriate, within the prison health care facilities.

cc: Members of the Legislature
Office of the Lieutenant Governor
Milton Marks Commission on California State Government Organization and Economy
Department of Finance
Attorney General
State Controller
State Treasurer
Legislative Analyst
Senate Office of Research
California Research Bureau
Capitol Press