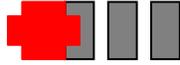


**Analysis of Cost and Service  
within the  
Utah Department of Corrections  
Bureau of Clinical Services**

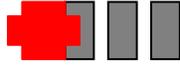
Prepared at the request of the  
Office of the Legislative Fiscal Analyst  
Salt Lake City, Utah

November 18, 2003



**Table of Contents**

Executive Summary .....3  
    Recommendations.....6  
Introduction .....9  
    Review of Services Performed .....10  
    Report Structure .....11  
Healthcare Standards .....11  
Healthcare Organization .....13  
    Mental Health Organization .....14  
    Central Office Structure .....15  
Characteristics of the Inmate Population .....17  
    Inmate Population Projections.....17  
    Inmates with Chronic Illnesses FY 2002-2003 .....18  
Costs Factors Unique to Utah .....19  
    Structural Characteristics of the Facilities .....19  
    Draper Correctional Facility .....19  
    Utah State Prison –Central Utah Prison (Gunnison) .....20  
    Structural Characteristics of the Infirmaries in the Draper/ Gunnison Prison .....20  
    Responding to Future Needs: Special Housing Needs .....21  
Mental Health Beds.....23  
Pharmaceutical Expenditures .....24  
    Medication Formulary .....28  
    Hepatitis C .....30  
    Catastrophic Cases .....33  
    Outpatient Services .....33  
    Emergency Room Visits .....34  
    Healthcare Expenditures in Other States .....36  
    Cost Control Initiatives.....38  
    Claims Processing.....39  
    Staffing Levels.....41  
    Mental Health Staffing .....43  
    Current Employment Practices.....48  
    Turnover Rate and Vacancies .....48  
    Post Certification Practices.....48  
    Contracting or Privatization of Health Care .....51  
    Lower Costs/Better Cost Containment .....51  
    Provision of Adequate Equipment .....51  
    Recruitment of Health Care Staff.....52  
    Cost vs. Efficiency .....52  
    Financial Risks .....52  
    Liability.....52  
    Sharing Financial Risk.....53  
    Create Effective Monitoring Procedures.....53  
    Should the DOC Privatize.....53  
    Liability.....54  
    Summary .....54



## **Executive Summary**

In fiscal year (FY) 2002 the Department of Corrections spent \$18,288,233 and employed 210.65 full time equivalent (FTE) staff to provide healthcare to approximately 5,700 adult inmates. The average cost per inmate for healthcare was \$8.79 per inmate per day. Consumer price index during this period of time rose 4.2%. Inmates receive routine care in the outpatient facilities at each of the major institutions. Health services units treat inmate's acute illness, manage clinical conditions, provide basic dental care and treatment, process prescription orders, and in some cases, optical services.

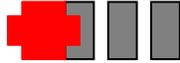
The Draper Prison is the hub of medical activity for all male and female inmates with a custody classification of medium and close. Draper serves the medical needs of approximately 3,600 inmates. Skilled nursing, intermediate, outpatient, and ambulatory (medical, dental and psychiatric) care is available. The facility has a 16-bed medical infirmary and a 144-bed inpatient mental health unit. Specialized (medical, dental and psychiatric) care is provided at this institution along with telemedicine clinics in psychiatry and orthopedics.

Since 1998, the number of inmates and their associated medical costs have increased by 12.08% until FY 2001 but then decreased by 9.16% in FY 2002. The inmate population increased from 4,861 inmates in 1998 to 5,448 inmates in FY2002. On a per inmate basis, healthcare spending has initially increased from \$9.63 in 1998 to \$10.27 in 2001. In 2002 the cost of health care services decreased to \$8.79 per inmate per day.

Healthcare expenditures decreased in all categories however, spending for pharmaceuticals, which totaled \$1,974,725 in FY 2002 decreased by 41% over the past three years. The number of psychotropic prescriptions filled by the Department decreased from 16.1% of the inmate population in 2001 to 11% of the inmate population in FY 2002.

Of the top ten medications listed by cost, three of the medications with the highest costs are used to treat psychiatric disorders, Hepatitis C and medications used to treat HIV/AIDS. The Department is taking steps to control prescription costs that include monitoring and approval of non-formulary pharmacy requests and observation of providers that routinely prescribe equivalent but more costly medications. The Department has taken steps to advise physicians on more cost-effective prescribing practices. However, despite the efforts taken to control these expenditures, it should be realized that newer more expensive drug therapies are likely to be a continuing source of expenditure for the Department.

The Department's salary and fringe benefit costs for permanent healthcare employees averaged 58% of total expenditures for health services.<sup>1</sup> We note



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that manpower shortages experienced in the various disciplines, especially nursing and pharmacy, and the expansion of facilities (e.g. Gunnison) will contribute to the need for additional personnel.

Expenditures for hospital services increased by an average of 2.7% in FY 2002. The principal provider of these services is the University of Utah. There is a negotiated rate for physicians and specialists at 68.6% of billed charges

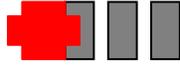
There are several initiatives that have been undertaken by the Bureau of Clinical Services (BCS) in the last year to reduce offsite costs. The Department is attempting to control hospital costs by taking steps to ensure that all appointments are medically necessary and reviewing all hospital bills for appropriateness of services. When a determination is made by a provider that a patient needs a specialist, a referral is given to the utilization review committee. If there are any questions regarding the medical necessity or fiscal responsibility, the provider may appear before the committee. The UR Department estimates that there were approximately 150 requests that pass through the UR screening process each month. The denial rate has averaged about 28%.

Historically, Utah has spent less per inmate per day for healthcare than several of its neighboring states of comparable size. For FY 2002 Idaho spent \$5.13, Delaware \$6.85, Wyoming \$11.61, Vermont \$11.82, North Dakota \$19.90, and South Dakota \$9.46. While comparison figures are useful, it should be noted that it is difficult to compare costs from one State DOC to another due to variance in accounting and reporting practices, and variables that may or may not be included in the budget. In some DOC systems, mental health is a separate budget and catastrophic limits apply. In other systems, medication or classes of medication are not in the budget.

From January 1 through September 1, 2001, health services staff responded to 140 medical emergencies which required transport to a hospital emergency room. Data was not available indicating how many of emergencies did not require transportation to an emergency room at a local hospital.

Providing routine medical care to inmates is challenging, given the large number of requests the health services units receive each day and the significant increase in chronic illness in the UDOC adult population. Last year nursing staff in health services units review as many as 134,000 non-urgent requests throughout the state, to include requests for prescription refills, appointments with medical, dental or mental health staff and requests for medical information. For FY 2002, approximately 1.8% of the inmates in the UDOC were identified as having at least one chronic medical illness or infectious disease.

Many of the interventions taken by the Bureau of Clinical Services within the last year have resulted in considerable cost savings for the Department. The BCS



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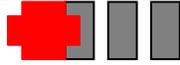
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was able to return \$1.2 million dollars to the general operating fund that has been used for security and other line items.

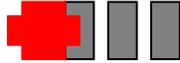
With regard to the privatization of health services, it is our collective opinion, that there would likely be no significant improvements made to the quality and level of health services provided to inmates by privatizing the health care services.

Current staffing patterns and compensation rates for health personnel, as well as costs for pharmaceuticals including psychotropic medications, are largely in-line with those that would likely be proposed by private vendors. The Department does have an opportunity to review its current level of staff against its overall budgeted allocation for staff and may consider freezing or eliminating certain mental health vacancies and adjusting current staff responsibilities to meet the treatment needs of inmates.

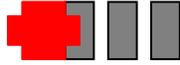


## **Recommendations**

- Recommendation No 1:** The Department should review the current separate management structure for mental health and program services. The issue of staff routinely switching from mental health to programs and its effect on the overall stability of staffing should be further reviewed by management. The reintegration of mental health and program services may also result in cost savings to the Department due to reduction in staff turnover and condensing associated management positions.
- Recommendation No 2:** One of the most important roles of the health services central office staff is to develop the budget for the health services and to approve health care expenditures and contracts. In the current fiscal budget, all expenditures are recorded in one budget statement that includes both the Draper and Central Utah Facility. It is recommended that budgets be separated for these facilities. It is further recommended that the Clinical Director report directly to the Executive Director.
- Recommendation No 3:** Admission data along with better information about the intensity of services should be used to optimize staffing levels. Skilled nursing cases should be concentrated into one area, less intensive cases should be moved to another area. As is evident, there is a need for additional acute care beds in the Department. It is also recommended that the average length of stay, utilization or occupancy rate for infirmaries is monitored in future statistical reports. It would also be advisable to track the number of infirmary admissions that are related to new intakes.
- Recommendation No 4:** It is recommended that when additional beds are added to the Central Utah Prison that consideration be provided for inmates that may be disabled or have special housing needs.
- Recommendation No 5:** The pharmacy could control its costs even further if the pharmacy at the Central Utah Prison is closed and all medication is filled from the Draper Prison



- Recommendation No 6:** Our Physician auditor has recommended the substitution and guidelines of less costly expensive medications as a way to save further pharmaceutical costs.
- Recommendation No 7:** It is recommended that a liver biopsy be added to the current treatment protocol for Hepatitis C. It is also recommended that the infectious disease nurse establish an educational program for the inmates on tattooing and sharing of disposable razors.
- Recommendation No 8:** It is recommended that the DOC explore a capitated rate with the specialist at the University of Utah to establish an aggregate rate with all of the specialty services provided by the University.
- Recommendation No 9:** it is recommended that consideration is provided for the physicians to receive an incentive to come back to the facility after hours which might include a \$200 per hour fee. The return of a physician may be sufficient to avoid the transportation and emergency room cost of an ER trip.
- Recommendation No 10:** The current budget is a decentralized budget, which comprises both the Gunnison and Draper unit. It is recommended that both health administrators have input into their budgetary process and are held accountable for expenditures.
- Recommendation No 11:** It is recommended EMTS receive inservice on medication and side effects and that updates are regularly provided both in didactic learning and self study modules.
- Recommendations No 12:** It is recommended that the step increases for experienced providers be reviewed and appropriate adjustments be made. Review the training and inservice of technicians especially related to the side effects of psychotropic medications.
- Recommendation No 13:** Given the size and clinical needs of the current inmate population, the filling of the third psychiatrist position in a timely fashion is warranted. The planned use of this position to provide oversight services to



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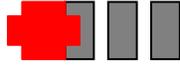
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other psychiatrists should include establishing and monitoring protocols for the use of psychotropic medications as well as general quality assurance monitoring related to psychiatry services.

**Recommendation No 14:** Though it is often difficult for state agencies to revise compensation and benefits plans for employees, the Department should consider categorizing the masters level mental health positions into two categories: licensed and unlicensed. Unless there are unique state laws or administrative rules pertaining to the use of masters level staff in correctional settings, there is no need to maintain separate pay structures for the various non-doctoral positions.

**Recommendation No 15:** It is recommended that ethical guidelines are developed for potential sources of conflict of interest for medical staff assuming security functions and for preventing medical personnel from crossing over into forensic procedures that have no legitimate medical purpose.

**Recommendation No 16:** With regard to the privatization of health services, it is our collective opinion, that there would likely be no significant improvements made to the quality and level of health services provided to inmates by privatizing the health care services. Current staffing patterns and compensation rates for health personnel, as well as costs for pharmaceuticals including psychotropic medications, are largely in-line with those that would likely be proposed by private vendors.



## **Introduction**

Like many state governments, Utah is experiencing declining revenues tied to a national recession. Faced with the magnitude of the deficit, every expense must be evaluated and difficult decisions will be required. In most states, expenditures for prisons and criminal justice activities represent one of the largest segments of their budgets. Of the prison and criminal justice portion, healthcare is often the most rapidly growing cost. Given the budgetary realities now faced by declining revenues, every aspect of healthcare expenditures warrants close examination.

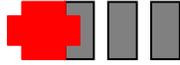
Privatization has been touted as a solution to rising correctional healthcare expenditures. However, many of the measures undertaken by contract providers to manage costs have been implemented by state systems. Two primary examples are utilization review and negotiation of hospital discounts. The UDOC has successfully implemented both of these strategies.

Private vendors bring some competitive advantages to the correctional arena. Advantages of privatization include personnel hiring, management and standardization of systems and bulk purchasing. The ability of the private sector to create a separate healthcare budget and realize that the contract cannot be reduced in times of budgetary cutbacks cannot be understated. Their administrative costs and the need to generate a profit therefore, dilute some of their competitive advantages.

We have been tasked with the goal of assisting the Department of Correction in evaluating their healthcare expenditures and identifying strategies to manage costs. We bring to this project a wealth of experience, reflecting 55 years of work in correctional healthcare, both in public and private correctional provider organizations. Our knowledge of best practices from the industry has been obtained from attending many presentations at national conferences and from correctional publications. We have seen many of the best programs in action during accreditation surveys and consulting trips.

On a positive note, we found that the staff is very competent and motivated and are capable of implementing the necessary changes. We were quite impressed with the knowledge and management style of the health administrators, medical director and director of nurses.

However, change is always difficult and will be especially difficult for the UDOC in times of budgetary cutbacks. It is human nature to become accustomed to a routine. Strong leadership and persistence will be required to change long established practices.

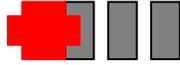


## **Review of Services Performed**

To accomplish this task, we have reviewed documents that cover every aspect of the medical and general prison operations. Meetings were conducted with key staff, and site visits were conducted at the main facilities. Dr. Moore has previously visited many of the jail facilities and had familiarity with the structure of the health care provided in the county jail system. During our institutional visits, we met with a variety of staff to seek their insights and perspectives. We are pleased to announce that we have identified several areas that will yield savings quickly and other long-term strategies that will help bring expenses under control.

The following services were performed in relation to conducting the review:

- 1. Site visit:** A site visit of the prison facilities was conducted on August 18-21, 2003, and included tours of the Central Utah Correctional Facility (CUCF), Gunnison, and Utah State Prison (USP), Draper. It is understood the Department also provides certain health and mental health services to Department inmates detained in municipal jail facilities throughout the state. These institutions were not visited; however, an overview of the services provided was given.
- 2. Staff interviews:** Interviews were conducted with health and mental health staff, security staff, and administrative staff.
- 3. Review of Assessment Procedures:** The procedures for the identification and assessment of inmates with medical and mental illness were reviewed along with the accompanying documentation standards.
- 4. Review of Documentation:** A review of the documentation of medical and mental health services was conducted including confidentiality and records management procedures. The review included evaluation of the Electronic Medical Records system as well as management of hard copy documents related to health services.
- 5. Review of Programs:** Reviews of special mental health housing units, infirmary units and treatment programs was conducted.
- 6. Review of Caseload:** Review of statistical information regarding the current mental health population and caseload management systems.
- 7. Staffing Patterns:** Review of staffing patterns for medical and mental health positions.



- 8. Medications:** Review of procedures related to the use of psychotropic, infectious disease medications as well as statistical information pertaining to numbers of inmates on medications and medication costs.
- 9. Review of various reports:** Review of various reports related service delivery statistics.
- 10. Budget:** Review of health care budget for the past three years.
- 11. Post-visit data review:** After the site visits, an additional review of various data and reports was conducted.

### **Report Structure**

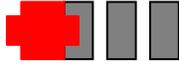
Following an overview of the current situation, the report will address distinct service and management areas providing a summary of findings and offering recommendations for change and improvement. The goal of this report is to assist the Department in identifying important aspects of the medical and mental health program related to required levels of services and cost-containment.

### **Healthcare Standards**

Inmates in all states have a right to adequate healthcare that is guaranteed by the prohibition against cruel and unusual punishment in the Eighth Amendment of the United States Constitution. In 1976, the U.S. Supreme Court addressed minimum requirements for prison healthcare in *Estelle v. Gamble*, which found that inmates have a constitutional right to healthcare that meets minimum adequate standards, and "deliberate indifference" to an inmate's serious health need by a correctional system is a violation of the Eighth Amendment.

In the 25 years since this case, courts have ruled that inmates have a constitutional right to access healthcare, a professional medical judgment, and medical care as ordered. However, the Supreme Court has found that inmates are not guaranteed the right to the best healthcare that is available in the community.

The Department has referenced the National Commission on Correctional Healthcare (NCCHC) Standards and has received accreditation at both of its prison facilities. While it is recognized that there are other standards from professional organizations that govern the practice of specific disciplines such as the American Correctional Association, the American Public Health Association, the American Nurses Association, the American Dental Association, and the Joint Commission on Accreditation of Healthcare Organizations, the Department



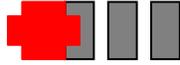
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has looked to standards developed by the NCCHC because of their focus on prison healthcare, and because they are more specific than other standards regarding daily practice issues.

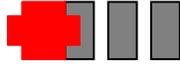
Two of the initial questions that we sought to answer was to evaluate whether the current system operates effectively and provides quality care. This issue was answered in an objective manner through our chart review to determine whether access to care was timely as well as additional audits to measure a number of outcomes measures for chronic illness. National guidelines from organizations including the American Diabetic Association, the National Committee for Quality Assurance (NCQA), and the National Commission on Correctional Healthcare (NCCHC) were utilized in the evaluation of chronic care management.



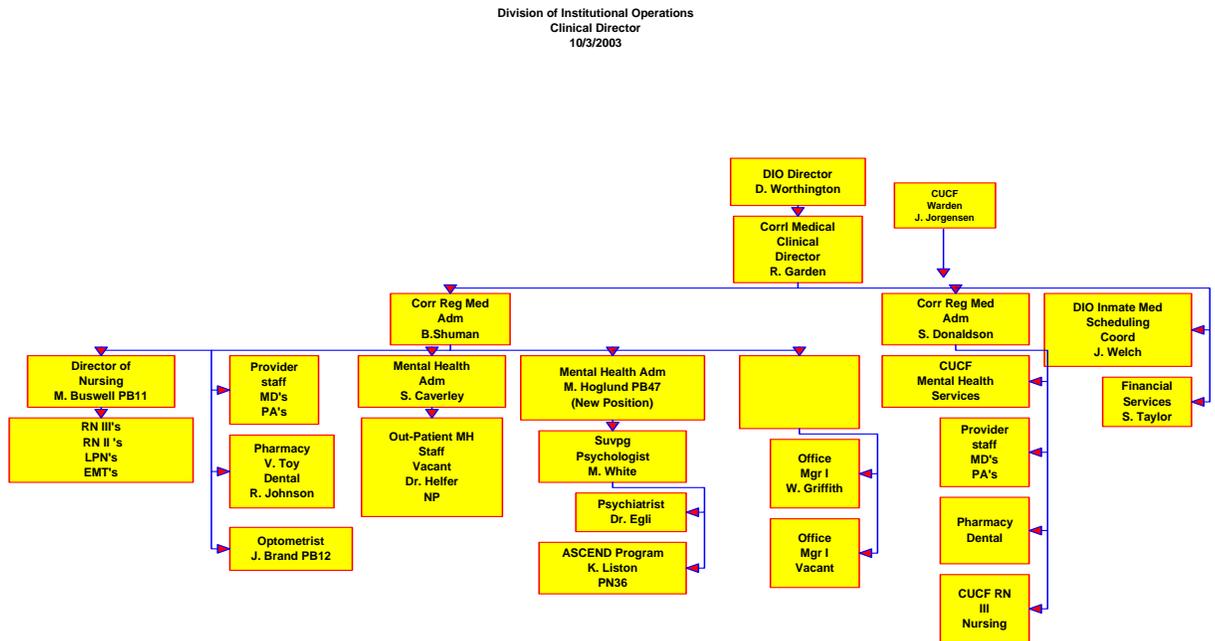
## **Healthcare Organization**

The Division of Prisons is managed by a Medical (Clinical) Director, who is responsible for the operations at all of prison and jail units in the State. The Clinical Director (a physician) reports to the Division Director and oversees medical care for the inmates. At each prison there is a health administrator that is responsible for the program. All respective disciplines e.g. mental health, dental, nursing etc. report to the health administrator and then to the medical director. Most decisions regarding utilization and pharmacy are made through a statewide committee comprised of physicians and administrators.

In FY 2002 the Bureau of Clinical Services streamlined their organizational chart and eliminated the positions of corporate medical administrator and mental health administrator. The result was that both clinical and medical administrative decisions have a single origin. Health administrators assume clinical and administrative decisions related to day to day operations. In the new organization, RN nursing staff was placed at the cornerstone of all functions. Nurses assumed the role of triage, chronic care clinics, infectious disease management and sick call (See Figure 1).



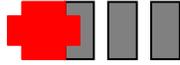
**Table 1 : Organizational Chart**



### Mental Health Organization

As indicated above, the core mental health program is organized as a component of the overall medical services program. Mid-level clinician-managers are established to oversee the operations of distinct mental health services at various levels of care (i.e. Coordinator of Outpatient Services and Coordinator of Inpatient Services at Draper). Having mental health services a component of medical services is quite common in correctional settings. Other models include having mental health services stand alone as a distinct division with separate management. Both models have been proven effective in state correctional systems and there were no major issues identified as part of this review that would warrant making major changes to the current structure.

It was pointed out that approximately two years ago, a separate division of Programs was established, or “spun out” from the medical department at Draper. This division operates within its own management structure and separate clinical staff from that of the core mental health program. The Programs department provides a variety of psychosocial and psychoeducational rehabilitative programs that include a mental health component. Having the Programs department separate from medical and mental health services in correctional systems is a



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common structure. Often, correctional systems are forced to operate a programs division separately due to many of the services being funded by grants that require specific staffing, management, funding, and reporting.

It did not appear from the information provided during the site visits that the UDOC programs division was grant funded or bound to any requirements for separate management. Additionally, it was reported that there is currently a staffing issue resulting from the separation of the Programs department in that staff from mental health services routinely transfer to the Programs department in favor of the positions in that department. The result is routine gaps in staffing of the core mental health program.

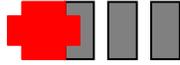
The transfer of personnel, though commonly seen in correctional settings, could have the effect of undermining the overall objectives of the facility.

**Recommendation:** The Department should review the current separate management structure for mental health and program services. The issue of staff routinely switching from mental health to programs and its effect on the overall stability of staffing should be further reviewed by management. The reintegration of mental health and program services may also result in cost savings to the Department due to reduction in staff turnover and condensing associated management positions.

### **Central Office Structure**

In creating a correctional health service or changing the existing structure, there are several considerations that should be made. It is our opinion that the healthcare authority should report directly to the Executive Director of the Department of Corrections. Healthcare is one of the most crucial and costly of the services provided to inmates. With the exception of overcrowding, more prisons are sued because of inadequate health services than any other condition of confinement.

The credentials of the individual serving as the Health Services Director are as important as the level to which the position reports. Many state facilities use clinicians of one sort or another to fill this position. It is imperative that the person designated as the health services administrator have a blend of both administrative skills and management experience since this is an administrative not a clinical responsibility. The skills needed are a blend of finance, staffing, material management, and working with inter and intra-governmental agencies. A professional administrator will need a physician clinical director to oversee professional matters; a physician will likely require a professional administrator to assist him/her in decision making. Therefore, it is difficult for one individual to perform all of these tasks. It is recommended that a physician and a professional



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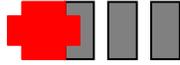
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health care administrator team are the best solution. In the current structure, the current clinical director has been an excellent clinical resource to the Department, with his knowledge of managed care in the State and the community. There are health administrators at both major facilities. Both of the individuals in these positions have clinical experience as nurses and are able to assist the medical director in the management of this program.

In general, managers charged with overseeing health and mental health services demonstrated a keen, and somewhat unique, awareness of cost and efficiency issues. In other state systems, managers often are not aware of the costs associated with their areas of responsibility. The demonstrated level of cost-consciousness and energy of management staff to achieve efficiencies was quite impressive.

**Recommendation:** One of the most important roles of the health services central office staff is to develop the budget for the health services and to approve health care expenditures and contracts. In the current fiscal budget, all expenditures are recorded in one budget statement that includes both the Draper and Central Utah Facility. It is recommended that budgets be separated for these facilities. It is further recommended that the Clinical Director report directly to the Executive Director.



## **Characteristics of the Inmate Population**

The population of the Utah Department of Corrections has more than doubled in the last ten years and has gone from 1129 inmates in 1988 to 5,064 inmates in 1998. Today the current population is 5,700. Corrections have seen a dramatic decrease for prison housing since the early release program of June 2001. Prior to the early release program, prison populations had been growing at a projected rate of 325 new offenders per year. The projected population for January 2003 was 6,441 compared to the actual count of 5,616, which were 825 offenders fewer.<sup>2</sup> Approximately 1,150 sentenced inmates are located in county jails throughout the State. The Utah Department Budget Hearing (February 5, 2003) indicates that the offenders being managed in the communities are being managed at a much lower cost than if they were incarcerated.

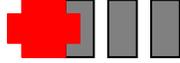
Population characteristics of the sentenced inmates indicate that 5.7 % of the population is over the age of 55 years old. There are 4-5 inmates that are over the age of 80 years old. The average DOC sentence is 2.7 years

## **Inmate Population Projections**

During the next eight years the population of the UDOC is expected to increase by approximately 8%. The increase is predicated on an increase of seventeen (17) males and three (3) females per year.<sup>3</sup>

Female offenders are projected to be among the fastest growing segment of the State's prison population. Female offenders bring a unique problem of management issues to the State prison system and require specific medical care related to obstetrical and gynecological problems and mental health issues.

The Department is required to provide continuous care from admission to discharge including ambulatory specialty care, inpatient care and emergency services. As the inmate population rises, so to will the number of inmates requiring specialized medical and mental healthcare. There will be a larger number of inmates with chronic illness, terminally ill inmates, and infectious diseases such as AIDS, TB and Hepatitis. In the mental health area, suicidal inmates, self-mutilators, substance abusers, sex offenders that are violently mentally ill will continue to challenge the Department's resources.



**Inmates with Chronic Illnesses  
FY 2002-2003**

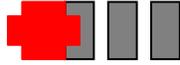
In our estimate, chronically ill inmates include inmates with:

- Cardiac conditions, including hypertension, angina, heart murmur, and congestive heart failure;
- Asthma, narrowly defined as those who received treatment with an inhaler or nebulizer;
- Neurological conditions, including multiple sclerosis, epilepsy, Parkinson’s disease;
- Diabetic conditions, both insulin-dependent and non-insulin dependent;
- Gastrointestinal conditions, including irritable bowel syndrome, ulcers, and gastroesophageal reflux disease;
- Hematological conditions, including anemia, leukemia, and sickle cell anemia; and
- Women’s health conditions, including abnormal Pap test results, estrogen replacement therapy, hysterectomy, and pregnancy.

Using this definition of chronic illness, an estimated 608 adult inmates, or 1.8 % of those held in Utah DOC correctional institutions, have at least one chronic illness or condition. The most common medical chronic illnesses in UDOC prison system are: diabetes, asthma, and hypertension. Chronically ill inmates may have more than one of these conditions. As shown in Table 1 there were approximately 7,296 visits within the last year related to chronic illness at both major prisons.

**Table 2: Chronic Diseases by Inmate Population FY June 2002-May 2003**

<b>Chronic Disease</b>	<b>Number of Visits for Inmates with chronic care conditions</b>
Hypertension	3,267
Asthma	1,198
Diabetic	1,125
Seizures	825
Pregnancies	99
TB	0
HIV	15
Hepatitis C	71



## **Costs Factors Unique to Utah**

Some factors that have driven health care expenses are unique to Utah. The foremost factor is the number of inmates that are housed in county jails. Approximately 1200 inmates are housed in-county jails. The DOC currently pays \$42.32 per day to house these inmates. Next year the cost will be increased to \$45.03. The daily per diem excludes medical costs and transportation costs.

To compensate for the limited health services capability of the numerous county jails and to provide higher security and health care for more complex medical cases, medical resources have been concentrated in the larger sites especially the Draper Prison. The medical unit at Draper has been traditionally referred to as the major infirmary and also houses a mental health unit. The infirmary is used to house a mixture of skilled nursing, intermediate care and assisted living cases.

Because of their traditional mission and goals to be everything to everyone, a tremendous amount of staffing and other resources have been concentrated at the Draper Prison.

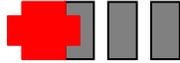
## **Structural Characteristics of the Facilities**

### **Draper Correctional Facility**

The Draper Correctional Facility was initially constructed in 1952. It has approximately 3,600 inmates and is comprised of several complexes which include:

- an intake unit,
- female unit,
- medical unit consisting of a 16 bed infirmary,
- forensic unit housing 144 mental health inmates of which 20 are female,
- supermax facility where most of the gang members are housed,
- mental retarded and developmental disabled unit (36 beds) and
- death row unit (16 beds).

All complex medical and mental health inmates are assigned to this unit. The population is 99% of the design capacity. The mental health facility is divided into five sections: a residential housing unit, an intermediate unit comprised of single and double cells and a behavioral modification unit which is single celled.



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The medical area is comprised of two trauma bays, a nurses station, officers station, on-site x-ray, a telemedicine room, a phlebotomy and laboratory area, three exam rooms, physical therapy room, 8 mental health beds, a pharmacy, infirmary, an optometry unit and a three chair dental operator. There are two waiting areas for inmates and administrative offices for the administrative and quality assurance staff. In addition there are satellite exam rooms and medical areas located in the mental health housing, supermax facility, intake area and women's facility.

### **Utah State Prison –Central Utah Prison (Gunnison)**

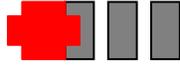
The Gunnison Facility is comprised of 920 male inmates. It was built in 1990. The facility is a medium security classification facility. All inmates are expected to work or attend school. There are approximately 150 inmates enrolled in a GED program and 600 inmates involved in carpentry and various other trade programs. The population is expected to reach 1120 inmates in October 2003. Medical, kitchen and housing areas were built with consideration for expansion. The facility will eventually hold 3,000 inmates. The facility also provides intake on a lesser scale than the Draper facility. There are approximately 20 new inmates booked at this facility per month. There are a number of transfers (approximately 1150 within the last year) at this facility as it is a frequent stopping point for inmates in route to the county jail facilities for inmates that are scheduled from the county jails to the University for consults or other diagnostic procedures. Inmates traveling to and from the county jails often stay overnight or on the weekends.

Housing areas consist of a north and south wing. There are 600 and 630 inmates respectively in each housing area. The north facility is divided into six pods with 16 units each. There is a 65 bed therapeutic community. There is a small segregation unit (60 beds) and a five-bed medical observation unit. There are two isolation cells.

The medical unit consists of a medication room, on-site pharmacy, joint conference room, telemedicine office, a four chair dental operator, an emergency room, two exam rooms and administrative offices.

### **Structural Characteristics of the Infirmaries in the Draper/ Gunnison Prison**

The Department currently has 16 infirmary beds at the Draper Prison and five observation beds at the Central Utah Prison. The infirmary at Draper meets the minimum standards set forth by the NCCHC for accreditation. There were 72.33 admissions to the infirmary from June 2002 to May 2003. Data on the average length of stay was not available.



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The utilization rate for these inpatient units is 97.5%. The high rate of utilization indicates the need for additional acute care infirmary level beds.

Infirmary beds similar that are found in correctional settings do not exist in community settings; therefore, comparative data is not available. The Department currently has a combined total of 16 infirmary beds, which is a ratio of 2.9 per 1,000 inmates. While there is no defined standard of infirmary beds for correctional facilities, a ratio of 10-12 beds per 1,000 inmates is considered of a planning norm.<sup>4</sup>

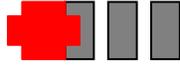
It is important to have an efficient process to transfer patients with extensive nursing requirements coupled with a mechanism to track utilization and make bed assignments. As an intake center, there will never be a way to predict the numbers of advanced medical cases to be received. To assure the availability of bed space, additional infirmary space should be incorporated into the Central Utah Prison.

**Recommendation:** Admission data along with better information about the intensity of services should be used to optimize staffing levels. Skilled nursing cases should be concentrated into one area, less intensive cases should be moved to another area. To some degree this has already been undertaken. Patients awaiting transfer, few of whom require special housing or frequent access to medical services, are sent to the Gunnison Facility. As is evident, there is a need for additional acute care beds in the Department. It is also recommended that the average length of stay, utilization or occupancy rate is monitored in future statistical reports. It would also be advisable to track the number of infirmary admissions that are related to new intakes.

### Responding to Future Needs: Special Housing Needs

The Utah DOC will be faced with a number of demographic trends for which they must prepare. The first reality is an aging population with growing medical needs. Studies in the industry indicate that there will be a graying of our prison population. To accommodate this need, it will be necessary to design, build and staff sufficient housing with the appropriate adaptations required to meet the needs of this population.

The first step is to establish categories of classification and a tracking system. Once that is completed, every inmate with special medical needs should be evaluated and classified. With more accurate information, the total placement needs will become clearer as will the specific distribution of housing types that is required. The addition of medical classification will help improve the use of current resources and facilitate access to additional data for planning purposes.



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The classification should include transportation to specify whether an ambulance, wheelchair van, or oxygen is required. Once this data has been inputted for all current inmates, system printouts can be used to track the number of inmates who require wheelchairs. The other categories will be helpful to transportation staff to reduce the risk of trip cancellations.

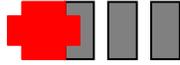
In conjunction with the implementation of the classification program, each prison should be evaluated as a potential site to house specialized medical units. The living areas at of the prisons should be surveyed to try to identify areas that meet or can be modified to meet access requirements. Program areas including education and job sites should also be included and an effort made to identify job assignments that can be held by disabled individuals. At least one properly equipped van is necessary for transportation to appointments or other offsite activities. Staff training is another key requirement.

Most paraplegic inmates will be able to function independently with adequate training, sufficient motivation, and appropriate facility design. They can be housed at any prison that has been designed or modified to meet their needs. If not incarcerated they would be living in an adapted house or apartment, and certainly would not be eligible for nursing home placement. Similarly, inmates with a history of sleep apnea should be able to function independently.

The lack of electricity limits frequently limits the choices to house inmates who require CPAP machines. Suitable locations should be identified across all security levels to place individuals with CPAP machines. Most of these cells should be in regular housing units, although some should be located in medical units and disabled housing. To assuage the concerns of the custody staff, the outlets should have ground fault interrupters and a locked shutoff switch outside of the cell.

Cases of Alzheimer's disease can be expected to increase as the population ages. With this condition most individuals can complete their own ADLs in an appropriate setting. Because of memory loss and a tendency to become confused, additional assistance may be required with medication administration. Unit residents will also need to be escorted to dining areas and recreation. Advanced cases will require increasing levels of assistance that should be provided in other units.

Assisted living is a category of housing designed to meet the needs of inmates who require some level of assistance with activities of daily living, but limited nursing intervention. One example is an individual who had experienced a stroke and now needs help getting dressed and eating but whose current medical intervention consists of routinely administered oral medication. Other than medication administration, these activities do not require a nurse and because most of the activities occur during the daytime, little or no nighttime staffing is



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required. The primary staffing consists of hospital aides. The physical layout of an assisted living unit should include the same considerations detailed for disabled access.

Skilled nursing care for the purpose of Medicare is defined as a service that is provided on a daily basis directly by or requiring the supervision of a licensed nurse or registered therapist. The key consideration for Medicare is whether the services can be provided in a home setting, or if the intensity of services warrants admission. This definition does not fit well with an inmate population because housing is provided; the issue is where and in what setting.

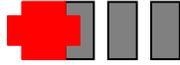
Skilled nursing is the highest level of care available in most correctional systems. Most of the residents housed in this setting will require extended care often measured in terms of years. Statistics on average length of stay do not accurately reflect the true duration of residence in the unit because the high number of short-term admissions will lower the average. A more accurate portrayal will be found in the median length of stay.

**Recommendation:** It is recommended that when additional beds are added to the Central Utah Prison that consideration be provided for inmates that may be disabled or have special housing needs.

## Mental Health Beds

Inmates with mental illness are housed at both state facilities and services are provided by state employed mental health personnel representing multiple disciplines (i.e. psychiatry, psychology, counseling, social work, etc.). Mental health services are organized as a component of the overall health services delivery system with mental health staff reporting through a chain of command subordinate to the medical administration. Coordinators of mental health services are designated at each institution and assigned specific areas of responsibility and supporting clinical staff.

In terms of special housing for inmates with mental illness, the Draper facility provides for a 144-bed forensic mental health unit for males and a 23-bed unit for females. Additionally, the Draper facility has a 16-bed infirmary with eight beds designated for acute mental health services.

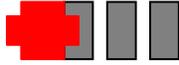


## **Pharmaceutical Expenditures**

The pharmaceutical costs for the Utah Department of Corrections has decreased by 41% over the past three years despite a national CPI increase of 25% over the same two-year period. In 2002, the cost of pharmaceuticals was \$1,974,725, in 2002, pharmaceutical costs were \$1,160,171 and in 2003 (to date) pharmaceutical costs are \$1,160,171. The UDOC was able to substantially decrease their medication costs (table 2) by :

- Operation of an in-house pharmacy and thereby eliminating the contract with the sub-contractual pharmacy to fill medications for the prisons and for inmates housed in the county jails.
- Decreasing the number of inmates receiving psychotropic medication. In 2001 the percentage of inmates on psychotropic medications was 16.1%, today it has decreased to 11 % of the inmate population.
- Changing the prescribing patterns of practitioners. In 2001, 34% of all mental health visits resulted in a treatment, today only 18% of the visits result in a prescription of psychotropic or other medication therapy.
- Strict adherence to the formulary. The pharmacist will not fill prescriptions without clinical justification.
- Discontinuation of psychotropic medication at intake. All new intakes are discontinued from their medications until the inmates can be evaluated in a controlled environment. While this stance is somewhat new and still controversial in the correctional industry, it has been applied in other state DOCs' such as Indiana.

The result of the above initiatives has been a decrease in prescription costs of approximately \$250,000 per year, UDOC spends approximately \$207/inmate/year; while neighboring states such as Colorado spend \$390/inmate/year.



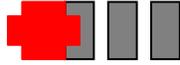
**Table 2: Top Ten Medications Purchased by Volume for FY 2002-2003**

<b>Medication</b>	<b>Common Trade Name</b>	<b>Indication</b>
Ibuprofen	Motrin	Anti-inflammatory
Ranitidine	Zantac	Histamine H2 antagonist
Infulenza Vaccine	Vaccine	Immunization
Naproxen	Naprosyn	Anti-inflammatory
Amitriptyline	Elavil	Antidepressant
Propoxyphene APAP	Darvacet	Analgesic
Protonix	Pantopazole	GI
Pantoprazole		
Cephalexin	Keflex	Antibiotic
Albuterol Inhaler	Proventil/Ventolin	Respiratory Inhalant
Enalapril	Vasotec	Ace Inhibitor
Isometheptene	Midrin	Headache
Dichloralphenazone		

The number of prescriptions filled by the Department at the Draper Prison was 48,437 new medications, 95,362 refills for a total number of prescriptions of 143,799 medications from June 2002 through June 2003. This is an average of 2.38 medications per inmate per month. Most contractual pharmaceutical companies rely on an average of 1.2 prescriptions per inmate per month. There are several factors at this facility that increase utilization. The Draper prison is the intake unit for the DOC, it houses the mentally ill unit and it also houses the female unit. Additionally, the pharmacy fills all medications including over the counter medicines. All of these factors have contributed to increased usage of prescriptions.

The majority of prescriptions are supplied to health services units by a central pharmacy located at each facility. Medications may also be purchased from local pharmacies if, they are not available in the institution's onsite stock and health services staff determines that the 24-48 hour wait for central pharmacy delivery would be too long for the inmate to wait. The use of starter dose packs has reduced the cost associated with offsite pharmacies. In addition to providing pharmaceutical services to the inmates at the institutions, the pharmacies also provide services to the inmates in the county jails.

The average cost per inmate per month for the Draper Prison is \$27.25 per inmate per month. At Central Utah Prison the cost is \$20.52 per inmate per month. These cost are very reasonable. The pharmacy costs are below many correctional institutions for a number of reasons:



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- First, the DOC has very few AIDS patients. Less than 1% of their population is receiving AIDS medication.
- Secondly, there are only 10 inmates that are being treated for Hepatitis C. The cost of the treatment for Hepatitis C is estimated to be approximately \$1200 per inmate per month. The few inmates that are currently in therapy for Hepatitis C contribute \$2.18 per inmate per month to the pharmaceutical costs.
- Lastly, the pharmacy has done a commendable job with its utilization and formulary management. Many of the medications are inexpensive and are cost-effective medication selections. The providers are using generic antidepressants and antibiotics as their first choices.

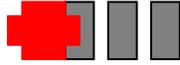
The BCS has taken over filling prescriptions for state inmates housed in the county jails as a cost-reduction initiative. This action consolidates records for these inmates in one location and gives the state an opportunity to seek greater discounts because of higher volume.

The pharmacy at the Central Utah Correctional Facility in Gunnison fills prescriptions in the morning of the next working day after they are written. By this time, if the prescription were filled at Draper, it would have typically arrived at the facility by courier or commercial delivery. Unless the Gunnison pharmacy is being operated during the afternoon hours, after most of the prescriptions are generated, its operation adds cost to the department budget without a substantial benefit. The volume of prescriptions filled at this facility does not warrant the cost of a part time pharmacist, clerk and medication inventory.

The pharmaceutical staff at the Draper Pharmacy should also be reviewed for efficiency. Many of the contractual pharmacies employ a ratio of one pharmacist to every 500-medication scripts filled. A pharmacy technician is expected to fill 300 medication scripts per day. There are three pharmacy technicians currently providing services in the Draper Prison. This number of technicians appears correct if one technician is responsible for filling prescriptions, one technician is responsible for data entry, and the last one for shipping.

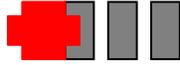
**Recommendation:** The pharmacy could control its costs even further if the pharmacy at the Central Utah Prison is closed and all medication is filled from the Draper Prison

A comparison of the top ten medications by cost indicates that the Utah DOC has similar findings to other state DOC where we have performed studies. Many of the medications are for depression, AIDS therapy and treatment of Hepatitis C.



1. Zyprexa
2. Seoquel
3. Lipitor
4. Neurontin
5. Depokate
6. Combivir
7. Interferon A
8. Zoloft
9. Paxil
10. Sustiva

In reviewing the above medications, we find that the prescribing patterns are similar for DOC systems that we have reviewed in Wisconsin and North Carolina in that seven of the top medications prescribed are for mental health conditions, Hepatitis C, and for HIV/AIDS. The prescription of atypical antipsychotic medications as first line agents in civilian populations diagnosed with certain types of mental disorders is becoming the accepted standard of care. The use and cost of psychotropic medications is increasingly a topic of discussion and concern for correctional systems. Historically, with fewer identified inmates with mental illness in correctional facilities and lower cost of older medications, little attention was paid to the issue of psychotropic medications. More recently, however, with the number of inmates with mental illness entering the system on the rise and the advent of newer and significantly more costly medications, the issue of psychotropic medications is becoming a real concern for correctional systems. In recent years, the transition of inmates off of older medications to newer medications has had a significant budgetary impact on correctional systems. As a matter of legal obligation, inmates confined to correctional facilities should not be denied access to the accepted standard of care for treatment of serious mental illness. That is not to say that correctional formularies should contain exclusively atypical antipsychotic medications. Offenders who took atypical antipsychotic medications with beneficial results before they were incarcerated should automatically continue to receive the same medication upon their incarceration, and the correctional formulary should include atypical antipsychotic medications for this purpose. Inmates with psychotropic disorders that have not responded to treatment of older medications should also be considered a potential candidate for atypicals, as they will decrease his or her likelihood of developing tardive dyskinesia. Correctional facilities making atypical antipsychotic medication available are taking proactive stance in preventing potential litigation on an important access to care issue.



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## Medication Formulary

Formulary management is one of the most powerful tools that an organized health care delivery can maintain. A formulary is a listing of approved medications available for ordinary practice within that organization. Unusual or rarely utilized medications are requested through a medication exception request or non-formulary request mechanism—this mechanism usually requires the treating practitioner to substantiate the need for the unusual medication, and explain why the common alternatives did not alleviate the medical condition. A good formulary contains medications from all drug categories and, as part of its process has a routine review mechanism for review to add or delete medications from the active listing.

Good formulary management can also direct treatment philosophies of the health care organization. It can limit experimental or unproven therapies. However, it can also limit access to newer FDA scientifically approved therapies for certain conditions—most notably in the treatment of mental health conditions, Hepatitis C and HIV. Still, even in the most extreme cases of limited access to some of these expensive medications, most organizations and formularies allow for continuation of treatment, or even initiation of treatment with non-formulary medications.

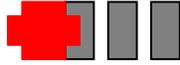
A review of the state pharmacy formulary was performed. It was typical to most correctional formularies. We found examples of available medications in most therapeutic classes, medications for the treatment of mental illness and HIV. The available dose strengths and the formulations were not unusual.

There is much variability across correctional systems on the issue of drug formularies and protocols for the use medications. The medication formulary was reviewed for completeness. Reasonable choices were available in all major classes and a wide variety of hypertensive and cardiovascular medications were available.

Even though the medical administration has done a commendable job of managing costs through the formulary process, a few items were identified in the budget that may be considered for additional savings.

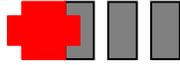
### ***Recommendations:***

- 1) **Zyprexa** is the most expensive antipsychotic medications and represents a substantial portion of the medication budget. The cost for an average dose runs around \$8 per day or more than \$3,000 per year and many patients require higher dosage. Zyprexa is also associated with substantial weight gain and the development of diabetes. Less expensive



- alternatives are available, some of which are in broad usage. One good alternative, Geodon was not being widely used and should be available for at least 20% less than the Zyprexa. Another trend in psychiatric practice involves the use of this medication for a wide variety of applications
- 2) Nasal steroids-Expenditure reports show almost \$4,000 in spending on Nasal **Flunisolide** and **Beconase**. Much cheaper oral antihistamines are an effective alternative in most cases.
  - 3) **Advair** combines an inhaled steroid and a long acting beta agonist. Its use is widely promoted and actively advertised on television. Purchase summaries show expenditures of \$2,200 for this product. The combination is convenient, but this convenience comes at a high price that tends to average more than 25% higher than the separate components. Medication requirements often change upon incarceration because of the smoke-free environment. A better and less expensive alternative would be to provide these medications as separate inhalers so that dosages can be adjusted and the department is free to respond to pricing changes for the individual components.
  - 4) **Depakote** was initially approved for the treatment of seizures but is used in the prison system primarily for therapy of bipolar patients. A generic form is available but some patients cannot tolerate the formulation, experiencing gastric upset. A protocol should be developed to manage the side effects.
  - 5) **Neurontin** is mostly used to treat chronic pain, which is a common problem in prison populations. The medication is used as an alternative to narcotic medications. Neurontin is FDA approved for the treatment of pain only and has not yet been approved for seizure management. Many DOC's have used this medication to manage Bipolar Disorders, however it has not had favorable outcomes with this population. A program to manage costs associated with Neurontin should be developed by the Pharmacy Division.

To be effective, the medication management program should provide for ongoing utilization review of medications on a physician-by-physician basis to ensure prescribing physicians adhere to protocols and to identify outlying prescribers. It is recommended, if not already in-place, the Department establish one or more positions (i.e. psychiatric nurse) to implement and manage a comprehensive program of psychotropic medication management and utilization review. Implementing such a management program in correctional settings can be difficult as physicians may initially be resistant to the level of scrutiny involved and other managed care-related activities. However, the program benefits the Department by ensuring not only that medications are used efficiently, but also those medications are used consistently among prescribing providers.



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It is our understanding that several of the recommendations that were made above have recently are already being implemented by the UDOC. It is recommended that guidelines be established for Zyprexa and Neurontin.

### **Hepatitis C**

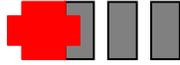
Faced with rising costs in the prison budget, coupled with deficits in the state budget, UDOC should closely monitor their expenditures for the treatment of Hepatitis C (HCV). HCV is a critical issue because of its extremely high cost per case and large number of potential cases. Even with careful selection, costs for HCV treatment could easily result in costs of \$500,000 per year. Unlike HIV, where the lack of treatment will result in mortality in almost every patient, Hepatitis C is benign for more than 95% of those infected. There is also strong clinical evidence that progression is less common in those patients who avoid the consumption of alcohol, which certainly should include prison inmates.

With a per-patient cost in excess of \$14,400 per inmate per year, it is imperative that cases be carefully selected to assure that each patient is clearly in need of treatment, is fully committed to comply with treatment requirements, and remains free of substance abuse. Unless the number of patients in treatment is carefully monitored, shortfalls for other programs may result. We recommend that funding for HCV therapy be appropriated as a separate line item so that these costs do not disrupt general medical program operations and to facilitate the monitoring of the number of active cases.

Data provided, shows that approximately 10 inmates are currently receiving treatment. Based on this information, it appears that the policy is effective in providing access to HCV treatment at a rate that is in line with the numbers being treated by other state systems. The current policy was developed in consultation with the University of Utah infectious disease program in consult with gastroenterology consultants that administer the treatment program.

It is not clear that a change in the policy is required at this time. The number of patients receiving therapy is not excessive and we heard no complaints. We were advised that as many as 30% of the inmate population could be infected. However, it is possible that the number of cases will not remain in control. Given that possibility, we are providing some comparisons with the policies used in other systems as a framework for potential modifications to the policy.

Most state prison systems require liver biopsies in order to verify that the HCV infection has caused liver inflammation and that treatment is needed to prevent further damage. The Utah protocol does not require a liver biopsy. In the absence of a liver biopsy more patients than necessary may receive treatment. Liver biopsies are not specifically required in the current protocol but are used by many systems to verify whether there is any fibrosis. In the absence of fibrosis,



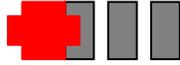
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or early scarring, there is no indication that the disease has progressed. This finding suggests that the illness remains in an indolent state. Since there are no lab tests that unequivocally indicate disease progression, biopsy is the only process that can be used to verify inflammation as an indication that intervention should be considered. In the absence of biopsy, many patients could receive therapy despite experiencing no ill effects from the virus.

The current policy requires elevation of the liver enzymes (ALT level) over a year in order to be referred for consultation. Although persistent enzyme elevation is not a completely reliable indicator of continued inflammation, it is used by many systems as a method to identify patients with a high risk of progression to cirrhosis.

The current policy makes no mention of disease prevention. Simple measures can be used to prevent future cases including the use of disposable razors, crackdowns on tattooing, and on drug use. Measures to check for drug use are already in place through random drug testing. Disposable razors are widely used in segregation settings and are handled appropriately according to inquiries that we made of the line staff during our visits to many of the prison sites. Tattoo prevention is frequently taken lightly by custody staff unless this issue is identified as a priority by prison leadership.

***Recommendation:*** It is recommended that a liver biopsy be added to the current treatment protocol for Hepatitis C. It is also recommended that the infectious disease nurse establish an educational program for the inmates on tattooing and sharing of disposable razors.



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## Hospital Provided Services

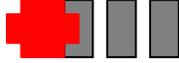
Hospital provided services consists of inpatient hospitalization, x-ray, laboratory services, emergency room and other ancillary services that the health services units are either unable to provide with current staff or cannot provide cost-effectively. These services are provided under professional medical services contracts. Total expenditures for these services have increased steadily from \$2,697,323 in FY 99 to \$3,133,600 in FY 02. The costs for offsite services for FY 03 reported at Gunnison Valley Hospital was \$2,253.50.

The Department contracts with the University of Utah Hospitals and the University of Utah Doctors and Clinics for services that cannot be provided within the prison. UDOC has a contract with the University of Utah for \$1,920,800 per inmate per year for medical services. There is a negotiated rate of 68.6% of the customary charges. If the Department does not use the full amount of the services a refund is provided at the 68.6% rate for a refund which is the full cost of recovery. If additional services beyond the \$2.8 million limit are needed, the University applies a fee of 68.6%. The University also has a riot provision that limits the amount of funds charged to the Department if a large-scale occurrence of more than 25 inmates are injured. The discounted rate with the University Hospital appears to be cost-effective, but alternative pricing using DRG (Diagnostic Related Group) should be explored. DRG billing bundles all hospital costs into a single price.

The advantage of this arrangement is that it simplifies verification of charges, since each aspirin and bag of IV solution does not have to be tracked. Furthermore, it encourages shorter length of stay and encourages use of the prison infirmary, because the hospital does not receive additional revenue for extra hospital days. A real time comparison with a selection of current hospital charges can determine whether this billing method will yield additional savings.

Specialty care services are included in the discounted rates; there is a provision for physicians to provide services in an amount not to exceed \$900,000 per year. Rates charged by physicians are set at 70% of customary charges for clinic visits and 85% of customary charges of on-site visits. Many of the rates that the Department has been able to establish with local hospitals are favorable rates for the Department. Rates paid by the UDOC are similar to rates paid by private insurance carriers.

Medicare rates are at 65% of customary charges, however there are few state DOC's that are able to negotiate these rates. The Medicaid rate provides an established formula for the Department and arguments can be made that because inmates are indigent, they should receive similar rates as indigent populations in the community.



**Table 4: Actual Medical Costs for Contractual Services**

	FY1999	FY 2000	FY 2001	FY 2002
Medical Contract Costs	\$2,697,323	\$3,067,871	\$3,754,100	\$3,133,600
Actual Med/Dental per diem	\$5.58	\$5.81	\$6.08	\$6.36
Medical CPI	3.4%	4.1%	4.6%	4.7%

### Catastrophic Cases

Six (6) percent of the hospitalizations relating to the care of 12 inmates were considered catastrophic in FY 03.

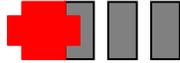
**Table 5: Catastrophic Medical Services**

	FY 00	FY 01	FY 02	FY 03
<b>Total Costs</b>	\$197,381.04	\$1,038,272.48	\$437,238.35	\$935,484.75
<b>Number of Patients</b>	3	14	6	12

The increase in total expenditures for professional medical services can be explained, in part, by changes in the inmate population. For example, higher pharmacy and medical expenditures are likely to result from the increasing number of older, sicker and mentally disturbed inmates, who are more likely to need more mental health and medical healthcare. However, we found that changes in hospital costs were also associated with catastrophic costs for individual inmates. In FY 2001, the increase in catastrophic costs was due to a van rollover where a single event contributed to 75% of the medical expenditures that year. The total catastrophic expenditures have increased in the FY03 due to both the number and acuity of the patients. The costs for catastrophic care were approximately one million dollars or 6% of the total medical budget. Needless to say catastrophic events have a huge impact on small state systems such as Utah.

### Outpatient Services

Most of the outpatient rates that had been established with the specialist were either 70% of billed charges or 85% of billed charges if the service is provided on site. The total costs for specialty clinic visits for FY 2003 was \$996,778.20. The breakdown of the costs was as follows:



**Table 6: Specialty Clinic Costs FY 2003**

<b>Specialty Clinic</b>	<b>Cost</b>
Anesthesiology	131,561.50
Dermatology	29,434.90
ER Physicians	32,214.70
Obstetrics	34,119.88
Ophthalmology	95,589.80
Orthopedics	131,276.60
Surgical.	168,408.55
UMC Med. Various clinics	374,172.27
<b>Total for clinics</b>	<b>\$ 996,778.20</b>

**Recommendation:** A strategy that has been used by the University of Texas Medical Branch at Galveston with the Texas Department of Criminal Justice is to establish an aggregate rate with all of the specialty services provided by the University. A capitated rate might be a strategy to use in establishing a rate for each service. Monitoring of all contracts is necessary for the delivery of quality service. Consideration should also be given to providing some specialty services in the field units such as podiatry and to avoid congestion and backlogs at Draper Prison. The use of an hourly rate with specialist in the communities of the prisons may prove to be more cost-effective than the arrangement with the University providers. Another strategy that has been used by a state system in Montana is to negotiate a rate with an insurance corporation such as Blue Cross. In Montana Blue Cross has managed all of the claims for the State DOC for a capitated rate of \$5.25 per inmate per year and has provided the DOC with access to their provider groups.

### **Emergency Room Visits**

From July 2002 through June 2003, there were 140 emergency room visits statewide or approximately 11.66 per month. There has been a tremendous decrease over previous years that accounted for 182 and 143 respectively for FY 2000 and 2001.

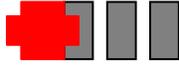
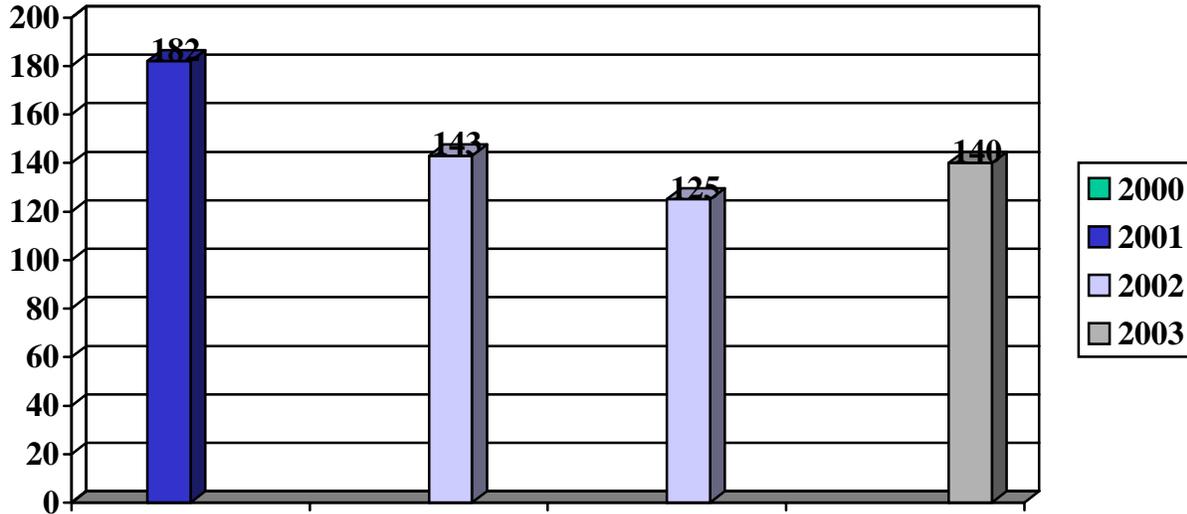
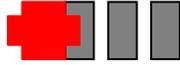


Figure 2: Emergency Room Visits



In conversations with the health care staff at the Bureau of Clinical Services, they indicate that their Emergency Room utilization and costs are increasing due to a reflection of more critical patients. A list of the ER trips and reasons were not available at the time of this audit.

**Recommendation:** it is recommended that the physicians are provided an incentive to come back to the facility after hours which might include a \$200 per hour fee. The return of a physician may be sufficient to avoid the transportation and emergency room cost of an ER trip.

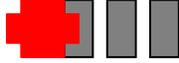


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## Healthcare Expenditures in Other States

The UDOC is spending a comparable rate for inmate health services as are other State DOC systems of comparable size. We collected information on prison healthcare from Idaho, Delaware, Wyoming, Maine, Vermont North Dakota, and South Dakota, which have comparable inmate populations and rates of growth. It should be noted, however, that direct comparisons are not always possible because these states correctional systems differ from Utah's in terms of the number and size of facilities, distance between facilities, types of inmate health problems, levels of care provided, security issues, and use of private vendors. While comparison figures are useful, it should be noted that it is difficult to compare costs from one State DOC to another due to variance in accounting and reporting practices, and variables that may or may not be included in the budget. In some DOC systems, mental health is a separate budget and catastrophic limits apply. In other systems medication or classes of medication are carved out of the budget.

As shown in Table 10, among the states for which we gathered data, many of the states reported similar per inmate expenditures for prison healthcare, as did Utah. Some of the States that had privatized their health care and the contracts with the vendor did not include the cost of prescription medications e.g. Maine or Delaware. In Wyoming, the vendor is only responsible for off-site care up to an aggregate catastrophic limit.

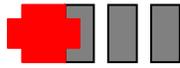


**Table 10: Comparison of Average Healthcare Cost per Inmate  
FY 2002**

<b>State</b>	<b>ADP</b>	<b>Costs</b>	<b>Exclusions</b>	<b>Cost/inmate/ yr</b>
Idaho (PHS)	6297	\$11,800,000	Cat limits\$25K/ inmate/yr	\$1,873.91
Delaware (First Correctional Medical)	6800	\$17,000,000	unlimited	\$2,617.65
Wyoming (CMS)	1070	\$46,869,000	Aggregate cap	\$6,419.63
Maine (CMS)	2170	\$9,200.000	Pharmacy	\$4,239.63
Vermont (CMS)	1436	\$6,200,000	Pharmacy	\$4,317.55
North Dakota Self Op)	1032	\$7,500,000	No exclusions	\$7,267.44
South Dakota (hospital based)	2954	\$10,200,000	No exclusions	\$3,452.92
<b>Utah (Self OP)</b>	<b>5700</b>	<b>\$18,288,233</b>	<b>No exclusions</b>	<b>\$3,2008.19</b>
<b>Utah</b>	<b>5700</b>	<b>17,088,233</b>	<b>Budget minus amount returned to UDOC</b>	<b>\$2,997.93</b>

The clinical service budget at the UDOC is arbitrarily inflated because each year funds are shifted from the Gunnison budget to the security budget. In the Finet budget for FY05, approximately \$162,000 were removed from the medical supply and line item budget, despite the fact that the facility is expected to receive 200 more inmates this year. In other years similar amounts have been withdrawn and allocated for security purposes and these amounts have been included in the Bureau of Clinical Services budget.

In FY 03, non-clinical services comprised \$1,476,681.35 of the budget for Clinical Services. Some of these costs include: TB testing for officers,



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custodians, wireless communications and port charges, window tint for officers station, flooring for officers station, several security positions and a variety of other non-clinical expenditures. Also included in this line item was dental equipment for \$12,321.50 and wheelchairs, which are generally one-time equipment capitol outlay line items that will not be repeated each year and should be depreciated over several years. There was also \$286,000 that was paid for retirement benefits for the medical staff. If the \$1.2 million dollars that was returned to the Department of Correction is backed out of the clinical service budget, the cost for inmate health care is **\$8.21** per inmate per year.

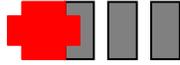
***Recommendation:*** The current budget is a decentralized budget, which comprises both the Gunnison and Draper unit. It is recommended that both health administrators have input into their budgetary process and are held accountable for expenditures.

### **Cost Control Initiatives**

The health care staff have developed and implemented a number of cost reduction initiatives. These have included the implementation of a formulary, reduction in ER referrals, utilization review of specialty referrals, screening of state inmates designated for county jail placement, and the provision of prescriptions for state inmates in county jails. Many of these initiatives have been summarized in articles by the healthcare staff. The most recent publication appeared in the Journal of Correctional Health Care.

There are several initiatives that have been undertaken in the last several years to reduce offsite costs. The Department is attempting to control hospital costs by taking steps to ensure that all referral appointments are medically necessary and reviewing all hospital bills for appropriateness of services. When a determination is made by a provider that a patient needs a specialist, a referral is given to the medical specialty review committee to review the request. The UR committee reviews all requests and meets weekly. If there are any questions regarding the medical necessity or fiscal responsibility, the request is pended for further review. The UR Committee estimates that there are approximately 150 requests that pass through the UR screening process each month. The denial rate has been approximately 28%. A unique feature of the UR process is that the referring physician has the option of appearing before the UR committee. This assures that the process does not lose touch with the providers.

In most managed care corporations the denial rate is around 8%. The medical director indicates that most of the inmates that are denied referrals are seen on-site by providers. This is an area that warrants a quality assurance/risk management along with an analysis of budget, financial information and data. These steps can provide the medical director with an early warning of quality deterioration caused by a program contraction and decreased services. Cases



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that are denied should be reviewed so that cases where urgent care is/was needed, those diagnoses are not delayed.

Unfortunately, once an inmate is admitted to the hospital, there is not a case management system in place to review and perhaps deny unnecessary laboratory or diagnostic procedures. A case management system, coupled with a claims management review would save funds in hospital expenditures.

The UR coordinator has also generated a daily list of patients that are hospitalized each day. If this is not already taking place, the health care staff should coordinate with the UR management team of the hospital on a bi-weekly basis to ensure that inmates are discharged as expeditiously as possible. The number of hospitalizations for the Department last year has averaged approximately 10 inpatient admissions per month.

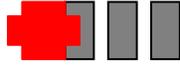
### **Claims Processing**

Claims processing is initially accomplished through two separate processes—direct billing and individual facility billing. In the direct billing process claims are sent by the providers of service (physicians and hospitals) to the Claims Processing Department. In the individual facility the providers of service send billing process claims to the individual facilities at which the inmates receiving healthcare are housed. Upon receipt at the individual facility form is initiated in order to process the claim for payment and a nurse or a clerk enters an accounting code. In addition a check is made for the utilization review authorization which serves as a receipt document.

The Department has just started to review claims. Approximately 10% of hospital charges are overstated, thus it is common for organizations to review high cost expenditures and catastrophic cases. A significant amount of funds can also be recovered by reviewing all claims. There are several private firms that provide this service, it is recommended that the Department contract with such a firm with the intent of training an accounting staff member. Fees could be negotiated based on the amount of funds recovered.

There are several other steps that the Bureau of Clinical Service has taken to reduce expenditures and enhance cost containment. These include:

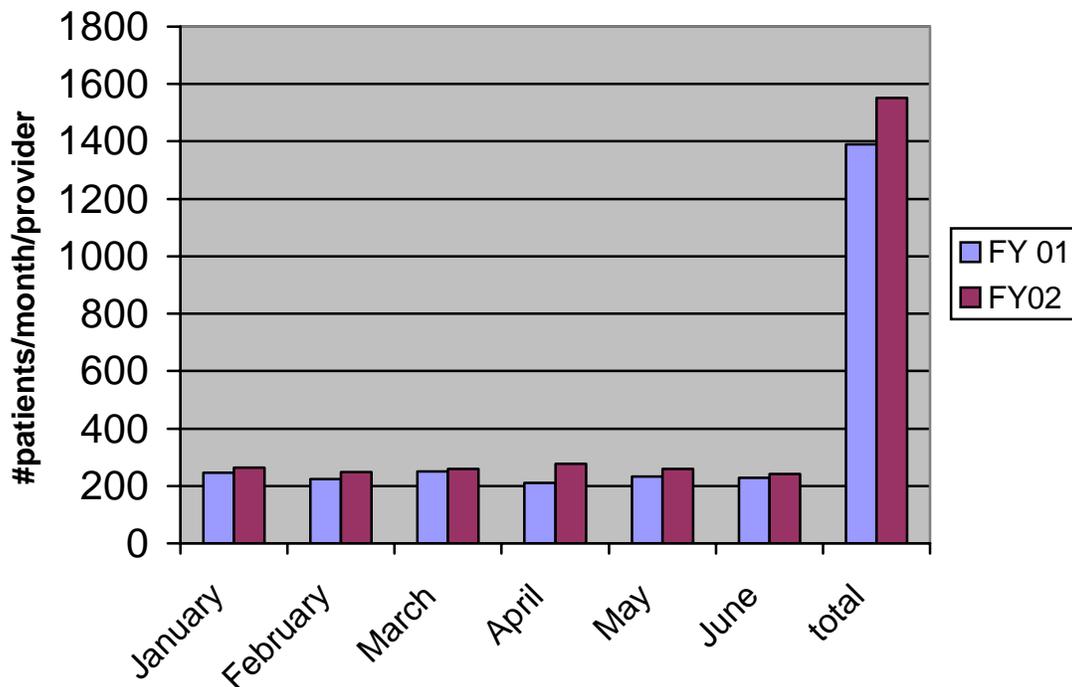
- Elimination of waste and improvement of provider productivity
- Use of employee time more efficiently by creative scheduling of services
- Employ less costly substitutes for providers such as pharmacy technicians for pharmacist and medical technicians for LPNs.
- Reduce services by prioritizing need

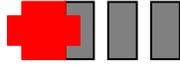


None of the areas that have been curtailed by the Bureau of Clinical Services have had a reduction in the quality of care provided. A reduction of costs does not necessarily mean a reduction in quality. A health care program can be wasteful of resources and more costly than it needs to be when services are produced inefficiently.

In reviewing the budget of the Bureau of Clinical Services they have done an excellent job with the management of their budget. They have provided a number of initiatives that have included utilization review, shifting and hiring less costly providers, triaging all inmates by nurses prior to seeing a provider and tracking the productivity of their providers and nursing staff. In a comparison of psychiatric provider productivity, the Bureau of Health Services shows an increase of 10 % in provider productivity from FY 2001 to FY 2002. Activity was defined as a face to face contact.

**Table 3: Psychiatric Provider Productivity  
FY 2001-FY2002**





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## Staffing Levels

Staff is the primary resource of all correctional healthcare systems. The decisions made regarding their recruitment, selection, training and development have enormous impact in the success of the delivery system's goals. Failure to devote sufficient time, effort, and dollars to staffing issues reduces the quality of care and increases the probability of litigation.

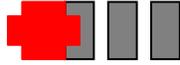
There are no national guidelines upon which a staffing model can be made to fit all correctional institutions. Unlike the organizational and security components of a correctional system, there are no national prison healthcare staffing models that can be adopted to fit all institutions. All of the sets of national correctional healthcare standards have shied away from specifying exact staffing ratios. Many factors need to be considered in deciding staffing ratios. Among them are the characteristics of the institutions, characteristics of the inmate population, the services delivered onsite, the number of infirmary beds, etc.

As the Executive Director of the National Commission on Correctional Healthcare, there was no request received more often than that for a model for staffing patterns. The temptation to create them was weighted against the very real dangers of doing so. It must be recognized that whatever staffing models might be developed for a particular facility is applicable only to facilities that share all of the assumptions on which such staffing is based. The staffing patterns developed must be viewed as a guide. Ultimately, work force patterns, the creativity and ability of the onsite staff will always be the most important factor in establishing workload parameters.

Both the healthcare and economic literature are replete with studies and stories regarding the current shortage of nurses. In the UDOC economic issues, geographical locations of prisons, and attitudinal issues characterize the current nursing shortage. Below market wage rates have certainly affected staffing in Utah Department of Corrections. Routinely, wage rates have been shown to be positively related to the recruitment of staff.

However, there are also a variety of non-economic factors that also have explained the reoccurring shortage of nursing manpower. Factors associated with job dissatisfaction, lack of autonomy, conflicts in power and control, few opportunities for growth, promotion or professional stimulation, inflexible schedules, as well as economic factors associated with supply and demand have all been plausible reasons for the shortage of nurses.<sup>5</sup>

Other factors such as the Nurse Practice Act has also impacted staffing patterns by defining what level of staff may perform each function. Historically, the UDOC has relied on LPNs and EMTs to provide many of the medication administration functions and perform the initial triage. While the salary rates for these positions may be comparable, the qualifications of the staff that chose these different



career patterns and the training involved in their respective schools are not equivalent. The current trend in many correctional institutions is to utilize LPNs and nursing assistants to perform many of the non-assessment functions that exist in correctional healthcare. This is a risk management issue, for while EMTs may deliver medication functions, their initial training will not allow them to be as proficient as LPNs and RNs in assessment functions and side effects of medications.

**Recommendation:** It is recommended that inservice on these topics is regularly provided both in didactic learning and self study modules.

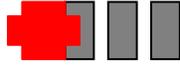
Salary has emerged as the most significant factor in the recruitment of nurses. The new nursing workforce is no longer oriented to the altruistic values of the past when the opportunity to serve others was the highest concern for nursing and compensation secondary.

In reviewing the compensation for the nurses at the UDOC, starting salaries for RNs and LPNS are competitive for new nurses in the area, however, salaries for experienced nurses are not competitive. An analysis of the salaries is located in table 11 below.

**Table 11: Salary Comparisons of Area Hospitals and UDOC**

	Agency	Minimum	Mid	Max	Shift differential
<b>RN</b>	University of Utah	16.40	27.08	37.75	1.50
	Salt Lake County Jail	14.48	21.49	28.50	
	<b>UDOC</b>	<b>21.88</b>		<b>24.38</b>	<b>25.00 per shift</b>
<b>LPN</b>	University of Utah	11.41	15.46	19.71	1.38
	Salt Lake County Jail	11.39	14.91	18.42	
	<b>UDOC</b>	<b>11.41</b>		<b>13.79</b>	<b>25.00 per shift</b>

Low unemployment for nursing positions in the State, below market salaries and cumbersome hiring practices have contributed to the difficulty in hiring nursing personnel. In interviews with the nurse supervisors and the DON, it was ascertained that it frequently takes two to three months to clear a nursing candidate for hire. Positions must be posted and approved by the Office of Human Resources. All candidates must be interviewed. Interested candidates must undergo a security clearance and background check. Successful candidates then undergo orientation training provided at the facility before they are eligible for duty. There are delays at each step in the employment process



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and as a result many candidates accept positions from other healthcare agencies where the recruitment and selection process is more immediate.

In summary, if it takes two or three months or longer to advertise and clear a potential candidate, the time spent in recruitment and selecting potential health staff is wasted since the candidate frequently loses interest and accepts another position. The recruitment of full time candidates is hindered by the Department's bureaucratic hiring process.

While the Department has initiated sign on bonuses of \$2,500 to fill vacancies and has performed an outstanding job in recruitment, they have not alleviated the vacancies caused by vacation, sick time, call-ins, holidays, etc. Their current vacancy rate for nurses is 15%.

**Recommendations:** Review the step increases for experienced providers and make appropriate adjustments. Review the training and inservice of technicians especially related to the side effects of psychotropic medications.

### **Mental Health Staffing**

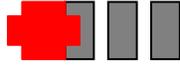
The core mental health program is served by a full complement of mental health professionals, the majority of which have two or more years of experience with the Department, and many have over five years of experience. Staff represent all mental health disciplines at the bachelors, masters, and doctoral levels of education. Additionally, staff possess, or are in pursuit of, state licensure related to their respective positions.

Staff productivity is closely monitored by management staff using a variety of productivity reports to track the volume of services provided by each staff member on a monthly basis. In general, the workloads of staff members from various disciplines were within expected norms for the population served. There were opportunities for increased efficiencies observed in some areas of staffing, while other areas seemed to be at peak efficiency and perhaps in need of additional staff.

The following section of the report will address staffing by discipline and work area.

**Psychiatry:** There are currently two full-time psychiatrists based at the Draper facility and one vacant position for a third psychiatrist.

Psychiatry services are provided to the Gunnison facility via televideo conferencing technology utilizing one of the psychiatrists at Draper. In addition to being a cost-effective means of providing psychiatry services to a rural facility, the use of telepsychiatry also ensures a high level of consistency of services



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between the two institutions.

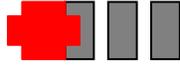
Psychiatrists are well-integrated with the other mental health disciplines as well as other medical staff and routinely make use of the information provided in the EMR by other clinicians in making decisions regarding treatment and the use of medications. This high level of integration and effective working relationships between psychiatrists and other clinicians likely contributes to the efficient use of costly psychotropic medications.

In regards to productivity, psychiatry inmate encounters were reported at approximately one-hundred encounters per month per psychiatrist on average. In many prison settings, psychiatrists can see 150-200 inmates per month, or more. However, the high level of communication between the Utah DOC psychiatrists and the other mental health staff, as well as the judicious review of clinical information performed by each psychiatrist, may account for lower numbers of inmate encounters.

Before looking negatively at the number of inmates seen per month by psychiatrists, the Department should consider that the current methods are resulting in low numbers of inmates requiring costly psychotropic medications. Other factors, including inmate movement, escort of inmates, and large geographic area of Draper may also effect productivity of psychiatrists.

***Recommendation:*** Given the size and clinical needs of the current inmate population, the filling of the third psychiatrist position in a timely fashion is warranted. The planned use of this position to provide oversight services to other psychiatrists should include establishing and monitoring protocols for the use of psychotropic medications as well as general quality assurance monitoring related to psychiatry services.

**Olympus Unit Staffing:** The following table outlines the staffing pattern for mental health clinicians at the forensic mental health unit (Olympus):



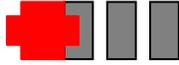
<b>Unit</b>	<b>Census</b>	<b>Program</b>	<b>Current Staff</b>	<b>Comments / Recommendations</b>
A	11	Sub-acute, male	2 clinicians assigned to cover units A and B.	Given the requirement to see inmates on a frequent basis, this is an appropriate level of staffing for these two units.
B	35	Intermediat e, male	(see above)	
C	44	Residential, male	2 clinicians assigned to this unit, plus 2 staff come from outpt. services to lead groups.	This is an appropriate level of staff for this unit.
D	19	Female	1 Ph.D. level staff assigned to this unit	This is an appropriate level of staff for this unit.
E	36	ASEND II	1 Therapist assigned to this program	This is an appropriate level of staff for this unit.

The ASEND program also has staff assigned to the ASEND I facility that is separate from the ASEND II unit. There is also a full-time program coordinator for the overall ASEND program.

The staff working the Olympus units carry relatively smaller caseloads compared to staff providing outpatient services to general population inmates. This is justified based on the need for staff in the Olympus units to see each inmate on their caseload on a more frequent basis. Staff in the Olympus units commonly reported seeing each inmate on their caseload individually at least once per week.

**Outpatient Staffing:** The clinical staff assigned to outpatient services is comprised of psychologists, social workers, licensed clinical therapists, and psychological assistants. The number of outpatient staff assigned to Draper is sufficient to meet the needs of the current caseload.

The outpatient mental health staffing pattern at Gunnison is more modest relative to the caseload than that seen at Draper, and includes: 1 FTE psychologist, 1 FTE social worker, and 1 FTE psychological assistant. Apparently, additional positions existed at the facility in the past, but have recently been frozen or reallocated to other programs. During the site visit at Gunnison, staff indicated they were limited in terms of the scope of services they could provide due to the



current staffing pattern. Staff requested having two additional positions in order to provide for a designated counselor for each housing unit.

**Recommendation:** The current caseload at Gunnison warrants the allocation of an additional clinician. This would improve the level of basic mental health services currently provided to inmates. Additionally, the staffing needs of the institution should be reevaluated as additional bed space is added to the institution due to planned expansion.

If one generically looks at the current caseload numbers at both facilities for inmates receiving mental health services as outpatients, and for those housed in special mental health housing units, the total estimated required staffing pattern would equal approximately fifteen masters level clinicians, five doctoral level clinicians, and three psychiatrists. The current allocation for mental health positions is: 23 masters level clinicians, 9.5 doctoral level clinicians, and three psychiatrists. The following table compares a generic staffing allocation to the current staffing allocation:

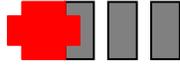
**Table 12: Staffing comparison with generic allocation for mental health**

Generic Staffing Allocation	Current Staffing Allocation	Variance
15 masters level FTE's	23 masters level FTE's	8 FTE's
6 doctoral level FTE's	9.5 doctoral FTE's	3.5 FTE's
3 psychiatrists	3 psychiatrists	0
23 Total FTE's	35.5 Total FTE's	11.5 FTE's

It is understood there are currently approximately eleven vacancies in the current staffing allocation suggesting the staffing pattern as it basically exists today may be a sufficient number of FTE's to serve the entire system.

**Recommendation:** The Department has the opportunity to achieve greater efficiencies in its labor costs for mental health positions by carefully reviewing the need to fill current vacancies. It's highly possible the Department could meet its mental health program service requirements with the current pool of staff without filling some of its current vacancies. The generic staffing pattern indicated above would closely approximate the proposed staffing pattern of a private correctional health company in a procurement process.

Additionally, given the variance in compensation costs, the Department should review the need for doctoral level psychologists



and opt for masters prepared clinicians whenever the work to be performed can be performed by a masters level clinician. Typically, doctoral level psychologists are utilized for positions requiring psychological testing, diagnostic assessment, supervision of masters level clinicians, and management of programs. The Department's allocation of 9.5 FTE's for doctoral level psychology positions seems high for the population served.

**Staff Compensation:** A spreadsheet indicating compensation plans for each position showed the following average annual salaries:

**Table 13 Mental Health Staff Compensation**

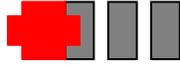
<b>Position</b>	<b>Average Annual Salary</b>
Psychiatrist	\$135,000
Psychologist	\$60,000
Social Worker	\$41,000
Licensed Clinical Therapist	\$44,000
Psy. Assistant II	\$37,000

The compensation and benefits plans offered to employees is highly attractive compared to industry standards as well as the compensation rates in the private sector. Particularly attractive is the benefit of 20-year retirement for clinical staff who complete the peace officer training program.

The Department utilizes different pay scales for social workers, licensed clinical therapists, and psychological assistants II. However, from the site visits, it appears there are staff from each of these disciplines within each job category providing similar services. In other words, it seems there are doctoral level psychologists often performing the same tasks as licensed and unlicensed masters level clinicians, as well as Psychological Assistant II's performing similar services to Licensed Clinical Therapists.

The Department should be aware that private sector companies would likely establish a distinct compensation plan and minimum educational requirements for each position and hold to those compensation plans regardless of whether an applicant's educational achievements were in excess of the requirements of the position.

It is noted that there was a significant range in salaries within each job category. This is presumably attributed to length of employment, with longer term state



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employees receiving higher levels of compensation than newly hired employees working in the same positions. This is common in government settings.

For comparative purposes, the compensation plans of private companies would be largely in line with the averages indicated above; however, the ranges in compensation within job categories would be minimal, or nil. Typically, a private company would compensate doctoral level psychologists slightly higher than the current average rate. For example, psychologists in leadership positions or supervisory positions would likely receive annual compensation of approximately \$65-70,000 per year. Licensed masters level staff would likely be compensated in the range of \$38-42,000 per year. And, unlicensed masters level clinicians would be compensated in the range of \$34-36,000 per year.

The Department's current costs of benefits per position are not known. However, typically, the benefits costs for government employees are higher than private sector employees due to the variances in health benefits and retirement plans. When comparing the total compensation costs of the current state employed clinicians and considering the benefits of privatization, any real savings to the Department would come from the reduction in benefits costs to the private company. However, the desired profit margins of private companies would absorb some of these savings resulting typically in just a couple of percentage points of savings to the Department.

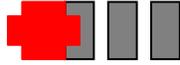
***Recommendation:*** Though it is often difficult for state agencies to revise compensation and benefits plans for employees, the Department should consider categorizing the masters level positions into two categories: licensed and unlicensed. Unless there are unique state laws or administrative rules pertaining to the use of masters level staff in correctional settings, there is no need to maintain separate pay structures for the various non-doctoral positions.

### **Current Employment Practices Turnover Rate and Vacancies**

In interviews with the nurse managers, at all of the institutions, most felt that if all of the positions were filled, nursing staff would be adequate. However, there are a number of positions that have not been filled because of turnover, and vacancies. The turnover rate of UDOC correctional facilities from January through August 2003 is approximately 6.28%.

### **Post Certification Practices**

UDOC administrators instituted a policy that requires a post-certified correctional officer to be present when inmates are being treated by a non-certified medical



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staff or when staff are delivering medication (pill line) to inmates. Departmental policy for treatment and medication to inmates states:

1. A correctional officer shall accompany medical staff on all outpatient housing unit pill lines and shall accompany medical staff on pill lines which require going cell to cell to distribute medications.
2. The officer shall remain in the immediate presence of the medical staff member actively assisting in the medication process by identifying inmates. Being immediately present shall be in the general area (TNF manual 6/03.06/C.1.2)

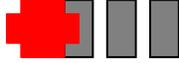
In times of budgetary crisis, officers were not hired which prohibited the UDOC from following its own policy. Officer staff could not comply with this policy and were present in only 50% of the times that were indicated. The lack of self defense and inmate custody training for clinical personnel resulted in four pending group grievances filed by the Bureau of Clinical Services employees against UDOC. The employees were requesting post certification training and inclusion in the retirement system.

In order to avoid future lawsuits, the UDOC, performed a cost benefit analysis of the costs of hiring additional officers as opposed to the cost of certification of clinical staff and the participation of the clinical staff in retirement at twenty years as opposed to thirty years. It was determined that the cost to the UDOC would only increase \$100,000 annually to post certify all of its providers as opposed to hiring 12 additional correctional staff.

It was estimated that the cost of 12 FTE additional correctional staff in entry-level wages was estimated to cost \$328,000.

The Bureau of Clinical Services has more professional staff than other parts of the Department of Corrections. As noted previously approximately 58% of the expenditures are salaries for professional staff consisting of doctors, dentists, nurses, technicians, and mental health providers. Retirement benefits average approximately 30% of the salary. This is an amount that is higher than in many state governments due to the post certification of health staff as law enforcement employees which has made them eligible for retirement after twenty years of service.

Post Certification has allowed clinical workers to double as security guards. The impact of the Department offering a 20-year retirement program totals \$426,000 per year including the funding of vacant positions.<sup>6</sup> The cost of certification was \$86,000 and BMS salaries during post training were estimated at \$65,000. (see table 14 below)



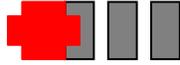
**Table 14: Comparison of Post Certification and Public Safety Retirement**

<b>Cost Category</b>	<b>Amount</b>
Moving BMS to general retirement fund	\$426,000
Post training costs	\$ 86,000
BMS salaries during post cert. Training	\$ 65,000
<b>Total</b>	<b>\$577,000</b>

Thus, the difference for the Department was \$249,000. UDOC absorbed this cost within its budget to help alleviate hiring and staffing difficulties with correctional officers and to enhance stability of providers in the professional staff.

The post certification has both advantages and disadvantages. One of the advantages is that it assists correctional officers in that they do not always have to be present for inmate movement for medication administration, sick call etc especially of minimum and medium custody inmates. A disadvantage is that the nurses are also officers and there may be in a conflict of interest when a security situation takes precedence over a medical role. An example that comes to mind is that a technician may be involved in calming an altercation between an inmate and a fellow officer, nurse or inmate, and is now be the responsible provider to take care of the inmate. It is recognized that this system is in effect in the Federal Bureau of Prisons.

**Recommendation:** It is recommended that ethical guidelines are developed to potential sources of conflict of interest and having medical personnel cross over into forensic procedures that have no legitimate medical purpose.



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## **Contracting or Privatization of Health Care**

Contracting or privatization of health care has been an approach that many states and counties have taken to manage their spiraling health care costs. To date there are 28 states that have privatized their health care in whole or in part. Depending upon the contractual structure, "privatization" of health care often creates the conditions supportive of effective management: fixing a global budget that must be adhered to, putting managers at financial risk for their performance, and enabling managers to staff the inmate health care system effectively, unencumbered by substandard salary levels and inflexible work rules.

The principal design characteristics employed by contractual health care firms closely resemble those employed in a Health Maintenance Organization. In this model, access is provided to a complete health care system, with the correctional institution's cost being fixed and prepaid. The companies provide complete staffing, pharmaceutical, equipment, supplies, x-ray and administrative services inside the correctional facility and arrange for outside services with local providers and hospitals for specialty services and inpatient hospitalization.

If a municipality decides to privatize, several options must be considered. Will it contract for all of the services, will it share the financial risk with the contractor and what performance guarantees will it require?

Below is a discussion of the salient features of the aforementioned issues.

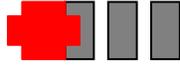
### **Lower Costs/Better Cost Containment**

Excessive cost or lack of financial budgetary control is a strong motivation for many clients seeking out health services from the private sector. In a contractual arrangement a specified group of services is provided for a fixed guaranteed fee.

Financing for the correctional health care program is done on a capitated basis or per inmate population. The total annual charge to an individual correctional institution is based on the inmate population of the facility. The contractor is responsible for all costs associated with the provision of health care services, enabling the municipality to establish an annual budget and be assured that budgeted expenses will not be exceeded. The outcome is that the municipality is able to plan and budget for health care costs with a defined limit of expenditure, which requires no governmental regulations, additional legislative appropriations or emergency funding for the provision of health care to inmates.

### **Provision of Adequate Equipment**

Limited budgets or cumbersome purchasing laws or procedures can result in an institution not being able to purchase necessary medical supplies or equipment. Frequently, the bureaucratic process of approval for purchasing requests may



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result in excessive delays. As a consequence, sophisticated electronic or computerized equipment may be obsolete by the time it is purchased. Moreover, lengthy delays in repairing or replacing defective equipment can sometimes necessitate the use of very costly off-site services. A private contractor is not obligated to any particular supplier or purchasing guideline and can quickly select the equipment best suited for the application and expedite purchase and installation.

### **Recruitment of Health Care Staff**

A problem frequently encountered by those responsible for providing health care services is the recruitment and retention of professional health care workers. Due to such factors as poor work place environment, low wages and rural settings, it is often difficult for correctional facilities to attract qualified health care professionals. Staff ratios may also be poorly managed. There may be few medical staff in a system and they may consist primarily of paramedics or LPNs.

The most common reason for contracting of health services has been to obtain needed health care staff. Nursing shortages coupled with below market wage rates have made it difficult for correctional institutions to recruit qualified staff. Many correctional institutions attempted to fill these positions with agency nurses and experienced major cost overruns.

There are definite risks to privatization of health care services. One of the major ones is the cost vs. the quality of health care service.

### **Cost vs. Efficiency**

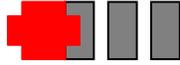
Concerns about the quality of service are probably heightened when the services to be delivered are by for-profit firms whose profits are at financial risk. The fear of most correctional officials is that the private contractor will reduce services to inmates in order to reduce their costs and increase their profits.

### **Financial Risks**

Contracting for health care also has financial risks for the municipality. Many contractors have filed for bankruptcy and left many providers with unpaid invoices. Many firms have cancelled contracts because they were unable to manage them at the negotiated price.

### **Liability**

One of the primary successes of contractual medical firms has been inmate lawsuits and the body of case law that is evolving which guarantees inmates the right to health care. Health care is seen by the courts as a basic human right, and the health care provided to the incarcerated population is judged against current



community standards. One of the most significant selling points of private contractors is that they will assume responsibility for any liability arising from the administration or delivery of health services. The private contractor claims to eliminate the municipality's involvement by indemnifying the municipality, defending all lawsuits and paying all associated legal costs and settlements. While it is true that the contract provider assumes responsibility for malpractice tort liability, contracting operations does not abrogate the jurisdiction's or the contractor's potential liability for violation of the Civil Rights Act, 42 USC §1983. In recent judicial decisions, most notably, in **West v. Adkins** (1988), the U.S. Supreme Court affirmed that a government is responsible for its health services whether they are supplied by government employees or by consultants under contract. The Court concluded: "Contracting out for prison medical care does not relieve the State of its constitutional duty to provide adequate medical care to those in its custody and does not deprive the State's prisoners of the means to vindicate their Eighth Amendment Rights." Contractual firms are not immune from liability. Cases have been brought before contractors for failure to provide Hepatitis C treatment in a state system and for wrongful deaths.

### **Sharing Financial Risk**

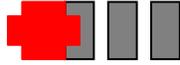
Contractual arrangements most likely to encourage effective cost control are those that establish a fixed price for delivering all health care and place the contractor at financial risk of losing money if costs exceed budgetary constraints. Cost plus or cost reimbursement contracts create few incentives to restrain spending. However in today's health care market with the nursing shortage, high cost of pharmaceuticals and cost of Hepatitis C treatment and other infectious diseases that may yet be on the horizon, a cost plus contract may be a very viable option.

### **Create Effective Monitoring Procedures**

Whatever approach is taken it is important that the municipality create effective monitoring procedures to be assured that the municipality receives the services that it has contracted for and that the contractor is treated fairly. Contracting to health care is not a panacea to solve all of the health care issues in correctional institutions. It is a partnership and should be treated like any partnership agreement.

### **Should the DOC Privatize**

The Bureau of Clinical Services has put many cost-effective strategies into place within the last four years. For FY 2000, \$18,927,000 was spent and in FY2002 a total of \$19,349,217. Many of the interventions taken by the Bureau have resulted in considerable cost savings for the Department. The BCS was able to return \$1.2 million dollars to the general operating fund that has been used for



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security and other line items. Items that were cut or eliminated by the BCS have not had a significant impact on the quality of care. Our physician and mental health auditor did not note major deficiencies in the care with the exception of the high rate of suicide. The cost of the UDOC compares very favorably when compared to other small state systems.

### **Liability**

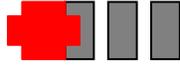
The rate of litigation for the UDOC has declined over the last several years. This decline has continued in recent years. In FY 2000, five cases were filed in FY 2001 and in 2002 and 2003, three cases were filed each year. The BCS also reports that the cost of litigating the cases has also decreased in recent years and went from \$139,263.50 to \$46,059.75 and \$19,413.25 respectively for FY 2001 and 2002. It should be noted that the Deland law suit was also settled during this timeframe.

### **Summary**

The Utah Department of Corrections is well served by a highly qualified and dedicated staff of mental health professionals; many with more than five years of service to the Department. These individuals come together in a concerted and purposeful fashion to deliver a full continuum of evaluative and treatment services to inmates with medical and mental illness.

The administrative and clinical leadership responsible for medical and mental health services is clearly focused on delivering health services in a humane, yet cost-efficient, fashion. Whereas, in many state systems, the medical and mental health program administrators often are not even aware of their program costs. The healthcare leadership in the UDOC is clearly conscious of their current and historical program costs and is continuously developing and fine tuning strategies to ensure services are delivered appropriately and in a cost-efficient fashion. Staff encountered were generally enthusiastic about their positions and expressed strong desires to find new and better ways of providing services to inmates.

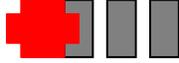
In regard to the privatization of health services, there would likely be no significant improvements made to the quality and level of health services provided to inmates by privatizing the service. In terms of costs, the current staffing patterns and compensation rates for health personnel, as well as costs for pharmaceuticals including psychotropic medications, are largely in-line with those that would likely be proposed by private vendors. The Department does have an opportunity to review its current level of staff against its overall budgeted allocation for staff and consider freezing or eliminating certain mental health vacancies and adjusting current staff responsibilities to meet the treatment needs of inmates.



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One major area of concern warranting significant Departmental attention is the rate of suicide among inmates at the Draper facility in the past two years. The Department's initiative to retain a separate consultant to review the suicides is a positive first step that hopefully will lead to the development, implementation, and ongoing management of a comprehensive program of suicide prevention to include intensive staff training and efforts to maintain a high level of staff awareness in regards to suicidal behavior by inmates.

By continuing on its current path under existing management and considering implementation of the recommendations made in this report, the UDOC health program will continue to improve and serve as a model program for other correctional systems to follow. We do not recommend privatization at this time.



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<sup>1</sup> Response to Intent Language Prepared by the Office of the Legislative Fiscal Analyst May 20, 2003  
Kevin Walthers Lead Analyst

<sup>2</sup> Utah Department of Corrections, Budget Hearing February 5, 2003.

<sup>3</sup> Correspondence from Cliff Butler regarding populations average daily population dated August 20, 2003.

<sup>4</sup> American Correctional Association. The Design Guide for Secure Adult Correctional Facilities. 1993

<sup>5</sup> Jacqueline Moore “Exploration of Factors affecting the Nursing Shortage in Correctional Healthcare”  
Unpublished Dissertation 1990, University of Maryland at Baltimore.

<sup>6</sup> OP Cite