
HEALTH CARE IN THE TEXAS PRISON SYSTEM

A Looming Fiscal Crisis

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The Texas Department of Criminal Justice (TDCJ) operates one of the largest correctional systems in the Western world. The challenge of ensuring that TDCJ prisoners continue to receive constitutionally mandated medical care is becoming increasingly difficult as the number of offenders with mental illness and chronic and infectious diseases continues to grow and treatment standards become more sophisticated and expensive.

UTMB Correctional Managed Care

The Correctional Managed Health Care Committee (CMHCC) is charged with overseeing and coordinating the delivery of healthcare services to offenders incarcerated under TDCJ jurisdiction.¹ To accomplish this, the CMHCC manages a partnership arrangement between TDCJ, the University of Texas Medical Branch at Galveston (UTMB), and the Texas Tech University Health Sciences Center (TTUHSC).

The UTMB Correctional Managed Care (UTMB-CMC) division provides a full range of healthcare services for about 80% of the TDCJ population. In addition to basic medical care, services include disease prevention and detection programs, chronic disease management, and dental and mental health care. With nearly 3,400 employees, UTMB-CMC operates one of the largest correctional healthcare systems in the country using a delivery model that includes basic as well as advanced levels of care:

- ambulatory clinics in 83 prisons, state jails, and other facilities
- infirmaries in 13 TDCJ prisons with a combined capacity of more than 400 beds
- regional medical facilities, specialty clinics, and “Hospital Galveston.”

UTMC-CMC also provides healthcare services for juvenile offenders incarcerated in Texas Youth Commission facilities.

Cost-Containment Initiatives

UTMB-CMC and its partners have utilized a number of cost-containment measures to control correctional healthcare spending. Examples of some of the most successful initiatives include the following:

- **340B Drug Pricing Program.** UTMB-CMC has participated in the federal 340B Drug Pricing Program² since 2002, which has reduced medication costs by as much as a third, depending on the drug class.
- **Clinical Management.** Several strategies are utilized to promote uniform, cost-effective processes for managing the oftentimes complex medical needs of TDCJ offenders. These include chronic care clinics, a case management program, evidence-based disease management guidelines, and stringent formulary controls.

¹ The primary mission and related authority of the CMHCC are established in Chapter 501, Subchapter E of the Texas Government Code.

² Section 340B of the Public Health Service Act, "Limitation on Prices of Drugs Purchased by Covered Entities," was established under Section 602 of the Veterans Health Care Act of 1992 (Public Law 102-585, 42 USC Section 256b). Because of UTMB's status as a disproportionate share hospital, the UTMB-CMC Department of Pharmacy is able to obtain the most favorable drug pricing available through the 340B Drug Pricing Program.

- **Telemedicine.** Over the past 15 years, UTMB-CMC and TTUHSC have used telemedicine to deliver medical care to thousands of TDCJ offenders. Because most TDCJ units are located in rural areas, the technology has proved to be highly effective in providing timely access to specialty providers without incurring the costs and safety issues of transporting offenders over considerable distances.
- **Pharmacy Services.** The Pharmacy Services section of UTMB-CMC has implemented a number of strategies to ensure timely, accurate and cost-effective delivery of medications to TDCJ facilities throughout the state. These include the centralized and automated pharmacy distribution facility in Huntsville, a computerized system that allows physicians at individual units to quickly order prescriptions from the central pharmacy, and a medication reclamation program.

Because of the cost-containment measures adopted by CMHCC, UTMB-CMC, and TTUHSC, annual increases in total and per capita healthcare spending for the TDCJ population have remained relatively low compared with correctional healthcare spending in most other states.

Statewide Healthcare Costs for TDCJ Offenders: FY 2001–2009

Fiscal Year	Average Daily Population	Total Healthcare Cost*	Cost/offender/day
2001	133,964	\$373.9	\$7.65
2002	131,819	\$381.2	\$7.92
2003	136,566	\$381.0	\$7.64
2004	144,975	\$392.4	\$7.40
2005	150,759	\$410.8	\$7.46
2006	151,284	\$420.4	\$7.61
2007	151,813	\$432.6	\$7.76
2008	151,712	\$477.5	\$8.60
2009	150,568	\$524.3	\$9.54

Represents all healthcare costs, including medical, mental health, dental and associated employee benefits.

*Cost in millions

2008–2009 Healthcare Costs for Large State Prison Systems

State	Cost/offender/day
Texas	\$9.54
Florida	\$10.74
Georgia	\$10.82
Maryland	\$11.16
Tennessee	\$11.85
Delaware	\$12.31
Ohio	\$14.35
New Jersey	\$15.89
California	\$43.83

Compared with other large state prison systems, the current per capita healthcare expenditure for TDCJ (\$9.54) is lower than that for other large state prison systems and significantly lower than that for California (\$43.83).

Although UTMB-CMC has become quite adept at “doing more with less” to maintain the standards of health care mandated by constitutional law, the immense problems caused by Hurricane Ike in 2008 along with a growing number of significant cost drivers have resulted in a huge deficit for UTMB-CMC.

Major Cost Drivers

Providing adequate medical care for the TDCJ population has become an increasingly expensive responsibility for the State, not only because of the sheer number of offenders but also because of changes in their demographic characteristics and health status.

Aging Offenders

The progressive aging of the TDCJ population has had a significant effect on driving up the cost of health care. Mirroring a national trend, the number of older offenders (50 years of age or older) has continued to increase at a faster rate than the overall TDCJ population. The average number of older offenders in the service population increased from 16,463 in FY 2004 to 22,766 in FY 2009, representing an increase of 38%. Older offenders currently represent about 15.5% of the total TDCJ population; further increases in the proportion of older offenders are projected over the next few years.

Data collected by CMHCC and UTMB-CMC show that older offenders access the health care delivery system at a much higher level and frequency than younger offenders.

- Older offenders are far more likely to require an onsite medical visit than their younger counterparts.
- Older offenders are far more likely more likely to require hospitalization than younger offenders, and accounted for 51% of hospital and specialty services costs in FY 2009.

The driving force behind this disproportionate use of healthcare resources is the fact that the aging offender population—much like the older free world population—has a high incidence of hypertension, diabetes, atherosclerotic heart disease and other medical conditions that require long-term and oftentimes expensive treatment.

HIV Infection

UTMB-CMC and TTUHSC have been at the forefront of correctional health care in the management of HIV infection. The use of potent antiretroviral medications and other treatment measures has been highly effective in delaying progression of the disease, resulting in substantial reductions in the number of HIV-related deaths and hospital admissions for HIV-related complications. However, these clinical advances have not come without a price.

- An average of 2,472 offenders were HIV positive in FY 2009, representing about 1.6% of the total TDCJ population. Nearly 61,000 prescriptions for antiretroviral drugs were filled for these HIV-positive offenders during FY 2009. The actual cost³ of these medications totaled \$17.8 million in FY 2009 and \$17.1 million in FY 2008.
- Although UTMB-CMC and the CMHCC have had some success in controlling this major cost driver through participation in the federal 340B Drug Pricing Program, medication costs for HIV treatment continue to be the largest single component of pharmacy expenses. The actual cost for HIV medications represented about 46% of all pharmaceutical purchases for FY 2009 and 48% for FY 2008.

³ Actual cost refers to the amount paid to purchase medications from pharmaceutical wholesalers, in contrast to utilization cost, which refers to the dollar value of individual patient prescriptions dispensed by the TDCJ Pharmacy.

Further cost increases are expected with the addition of new classes of antiretroviral medications, such as the integrase inhibitor raltegravir, to the treatment regimen.

Serious Mental Illness

Between 10% and 15% of U.S. prisoners are estimated to have a serious mental illness, compared with only about 3% of the general population.⁴ In FY 2009, nearly 9,200 TDCJ offenders in the UTMB-CMC sector were diagnosed with a serious mental illness, compared with only about 5,600 in FY 2004. This increase in the prevalence of serious mental illness among TDCJ offenders has significantly strained the personnel resources of the mental health program.

- The percentage of the TDCJ population on the mental health caseload in the UTMB-CMC sector increased from 10.4% in FY 2002 to 12.9% in FY 2009.
- In spite of the addition of more than 6,000 patients to the mental health caseload since FY 2002, there has not been a proportionate increase in the total number of full-time mental health employees, largely because of a substantial reduction in force that occurred in FY 2003.
- In FY 2002, UTMB-CMC employed a mental health staff of 335 full-time employees who treated approximately 10,800 mentally ill offenders (a ratio of 1 to 32). However, in FY 2009, only 285 full-time employees were available to treat approximately 16,500 mentally ill offenders (a ratio of 1 to 58).

Likewise, the financial resources of the mental health program are being strained by the increasing use of psychotropic medications in the treatment of mentally ill TDCJ offenders.

- More than 864,000 prescriptions for psychotropic medications were filled for TDCJ offenders in FY 2009, representing an increase of nearly 114% since FY 2002.
- Nearly 80% of the patients on the UTMB-CMC mental health caseload were being treated with psychotropic medications in January 2010.

Because of its participation in the 340B Drug Pricing Program, UTMB-CMC has been able to realize significant savings in expenditures for psychotropic medications. Even so, the actual cost of these drugs was about \$1.1 million in FY 2009, accounting for about 3.0% of total drug expenditures. Pharmaceutical spending is expected to rise because of anticipated increases in both the total number of mentally ill offenders started on psychotropic medications and the number of offenders requiring more than one type of medication. The recent shift toward the use of newer and more expensive antipsychotic medications for the treatment of schizophrenia and other psychotic disorders is another factor contributing to cost increases.

Hepatitis C Virus

The prevalence of hepatitis C virus (HCV) infection is considerably higher among correctional populations than among the general U.S. population. Approximately 19,700 offenders incarcerated in a TDCJ facility in April of 2010 had a diagnosis of HCV infection. Because universal testing for the virus is not performed in the TDCJ population, however, it is estimated that an equal number of offenders may be infected but have not been

⁴ Serious mental illness includes a diagnosis of major depressive disorder, bipolar disorder, or schizophrenia or other psychotic disorders.

diagnosed. Although most HCV-positive offenders are currently asymptomatic, those who develop a chronic infection are at very high risk for serious complications and death.

- Chronic HCV infection is now the leading cause of end-stage liver disease in the TDCJ population,⁵ and more cases of liver failure are expected as the proportion of older offenders continues to increase. HCV infection is also a contributing factor in at least 15% of all deaths from chronic liver disease among TDCJ offenders.⁶
- HCV-infected offenders who progress to end-stage liver disease require frequent and costly hospitalization and emergency room services for treatment of bleeding, abdominal fluid retention, and other serious complications. Ultimately, the only viable option for some of these offenders will be liver transplantation, a procedure whose associated costs will likely decimate the healthcare budget of TDCJ.
- Chronic HCV infection also is a major risk factor for liver cancer and is a contributing factor in at least a third of all liver cancer deaths among TDCJ offenders.

Like many other correctional healthcare providers, UTMB-CMC and TTUHSC are facing unprecedented challenges in addressing the growing HCV epidemic in the TDCJ population. These challenges revolve around financial and logistical impediments to evaluating and treating such a large number of HCV-infected offenders along with a constantly evolving consensus about how to best manage the disease in the correctional setting. The ability to meet these challenges has enormous public health implications since the vast majority of HCV-infected offenders will eventually return to their home communities with the potential to infect others.

UTMB-CMC has recently adopted many of the standards of care recommended by the National Institutes of Health for the management of HCV infection.⁷ These include selective treatment with a combination of ribavirin and pegylated interferon to eradicate the virus from the bloodstream as well as expanded use of liver biopsy to determine which offenders are most likely to benefit from antiviral therapy. Unfortunately, cost has been a major stumbling block to full implementation of these policies, and UTMB-CMC has had to limit antiviral treatment to those patients at highest risk for developing cirrhosis and subsequent liver failure.

Although UTMB-CMC and the CMHCC have been able to curb the cost of antiviral medications via the 340B Drug Pricing Program and contract negotiations with pharmaceutical companies, these drugs continue to be expensive.

- During FY 2009, an average of 251 HCV-positive offenders received antiviral therapy per month.
- Actual medication costs for treating this relatively small group of offenders amounted to \$1.5 million in FY 2009 and \$1.6 million in FY 2008, representing about 4% of all pharmaceutical purchases.

In addition to medication expenditures, the expanded use of liver biopsy to more precisely select those offenders who most likely to benefit from therapy is a major cost driver. Since approval of the new hepatitis policy in 2008, the liver biopsy rate has increased by upwards

⁵ Baillargeon J, Soloway RD, Paar D, et al. End-stage liver disease in a state prison population. *Annals of Epidemiology* 2007; 17:808–813.

⁶ Harzke AJ, Baillargeon JG, Kelley MF, et al. HCV-related mortality among male prison inmates in Texas, 1994-2003. *Annals of Epidemiology* 2009; 19:582–589.

⁷ National Institutes of Health Consensus Development Conference Statement: Management of hepatitis C: 2002–June 10-12, 2002. *Hepatology* 2002; 36(5 Suppl 1):S3–S20.

of 30%.⁸ Unfortunately, a Legislative Appropriations Request of \$4.4 million dollars for fiscal years 2010 and 2011 to fund the increased volume of liver biopsies was denied, resulting in a major funding deficit for the management of HCV-positive offenders.

Cardiovascular Diseases

The Texas prison population includes a large number of offenders with a variety of cardiovascular diseases, the most prevalent being hypertension and coronary artery disease (CAD), both of which occur primarily in older offenders (>50 years of age). Many offenders with these diseases also have hyperlipidemia and other lipid disorders, which can increase the progression of heart disease. UTMB-CMC currently provides medical care for approximately 27,500 offenders with hypertension and 5,000 with CAD. Offenders with these diseases are enrolled in onsite chronic care clinics where a medical provider evaluates their condition and monitors their treatment on a regular basis.

With the steady aging of the prison population, the number of prescriptions for antihypertensive and lipid-lowering drugs has skyrocketed.

- More than 1 million prescriptions for antihypertensive medications were filled for TDCJ offenders in FY 2009, compared with only about 486,000 in FY 2000 (an increase of 110%).
- More than 161,000 prescriptions for lipid-lowering drugs were filled in FY 2009, compared with only about 20,600 in FY 2000 (a staggering increase of 682%).

The availability of several generic drugs in FY 2008 has helped lower the cost of antihypertensive and antilipemic medications. Nonetheless, FY 2009 utilization costs amounted to nearly \$857,000 for antihypertensive drugs and more than \$608,000 for cholesterol-lowering drugs.

Although the number of offenders with CAD is still relatively small, this population accounts for a sizeable share of the total costs for off-site emergency care and hospitalization. Off-site hospital and emergency room claims paid by UTMB-CMC for evaluation and treatment of TDCJ inmates who developed an acute myocardial infarction (heart attack), severe chest pain, or other cardiac problems totaled about \$2 million in FY 2006 and more than \$3 million in FY 2008.⁹

Kidney Failure and Dialysis

More than 800 TDCJ offenders have varying degrees of kidney failure. During FY 2009, an average of 191 of these offenders required dialysis to treat their condition. Although this group of offenders constitutes only a fraction (about 0.13%) of the total TDCJ population, dialysis costs continue to be significant.

- Operational costs for dialysis treatments totaled \$4.1 million in FY 2009, averaging about \$21,500 per patient.
- The utilization cost of standard dialysis medications (an additional expenditure) amounted to about \$1.4 million in FY 2009.

⁸ Statement of Dr. Michael Kelley. Correctional Managed Health Care Committee Minutes; September 30, 2008.

⁹ Does not include claims paid for physician services.

These expenditures do not include the costs of maintaining an unobstructed vascular access site (i.e., fistulas, grafts, or venous catheters) to ensure adequate dialysis. Common complications associated with dialysis access portals include clotting, narrowing, infection, and bleeding, which often must be managed surgically in a hospital setting. In the UTMB-CMC sector, dialysis-related complications resulted in 175 hospital admissions during FY 2009 and 133 admissions during the first 7 months of FY 2010.

Asthma

Nearly 9,000 TDCJ offenders are receiving medical care for asthma. Treatment often requires a combination of long-term medications taken on a regular basis to control chronic symptoms and “rescue medications” for rapid, short-term symptom relief in the event of an asthma attack. Nearly 114,000 prescriptions for asthma medications were filled in FY 2009.

Expenditures for asthma medications have increased significantly over the last three fiscal years, primarily because of the government-mandated phase out of generic albuterol inhalers that use chlorofluorocarbon (CFC) to propel the medication into the lungs.¹⁰ The replacement inhalers, which contain a hydrofluoroalkane propellant, are less damaging to the environment, but they are also more expensive since generic inhalers are no longer available. As a result, the utilization cost of asthma medications has increased from about \$1.6 million in FY 2006 to nearly \$2.7 million in FY 2009.

Diabetes

UTMB-CMC provides medical care for approximately 8,000 offenders with either type 1 or type 2 diabetes. A substantial number of these offenders have already developed diabetic complications such as nephropathy, neuropathy, retinopathy and vascular disease. Although the proportion of TDCJ offenders with diabetes is still relatively small, more than 201,700 prescriptions for insulin and oral hypoglycemic medications were written in FY 2008 and nearly 198,400 in FY 2009. Thanks to significant reductions in the price of insulin obtained by UTMB-CMC through the 340B Drug Pricing Program in fiscal years 2008 and 2009, utilization costs for antidiabetic medications¹¹ have decreased from a high of more than \$1 million in FY 2007 to about \$361,000 in FY 2009.

Conclusions

The quality of medical and psychiatric care for TDCJ offenders has improved dramatically since David Ruiz and other inmates filed the historic class action lawsuit against the Texas prison system in 1974.¹² Over the past three decades, correctional health care in Texas has evolved from a woefully inadequate system characterized by poorly equipped infirmaries staffed primarily by unlicensed medical assistants and inmate aides to a comprehensive managed healthcare system that now serves as a model for other states and correctional organizations. Unfortunately, because of the cost drivers detailed in this report, the TDCJ correctional managed care program has reached a point where current levels of funding are not sufficient to meet the demands of an aging and sicker offender population. Additional funds are clearly needed to ensure that seriously ill offenders continue to receive constitutionally mandated health care.

¹⁰ U.S. Food and Drug Administration. Phase-Out of CFC Metered-Dose Inhalers. Available at <http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm063054.htm>.

¹¹ Does not include expenditures for insulin syringes and diabetic testing supplies.

¹² *Ruiz v Estelle*, 503 F Supp 1265 (SD Tex 1980).