



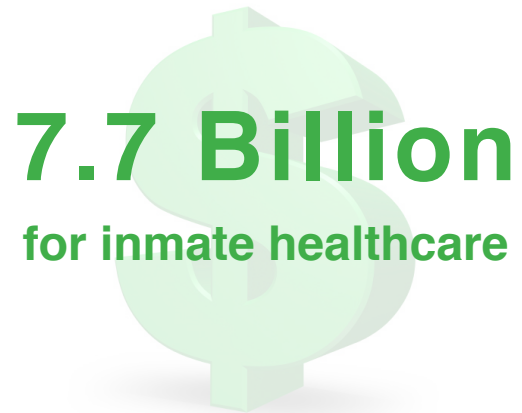
Telemedicine in Corrections

Cost-effective, Safer Way to Provide Timely Healthcare to Prison Inmates



The Challenge

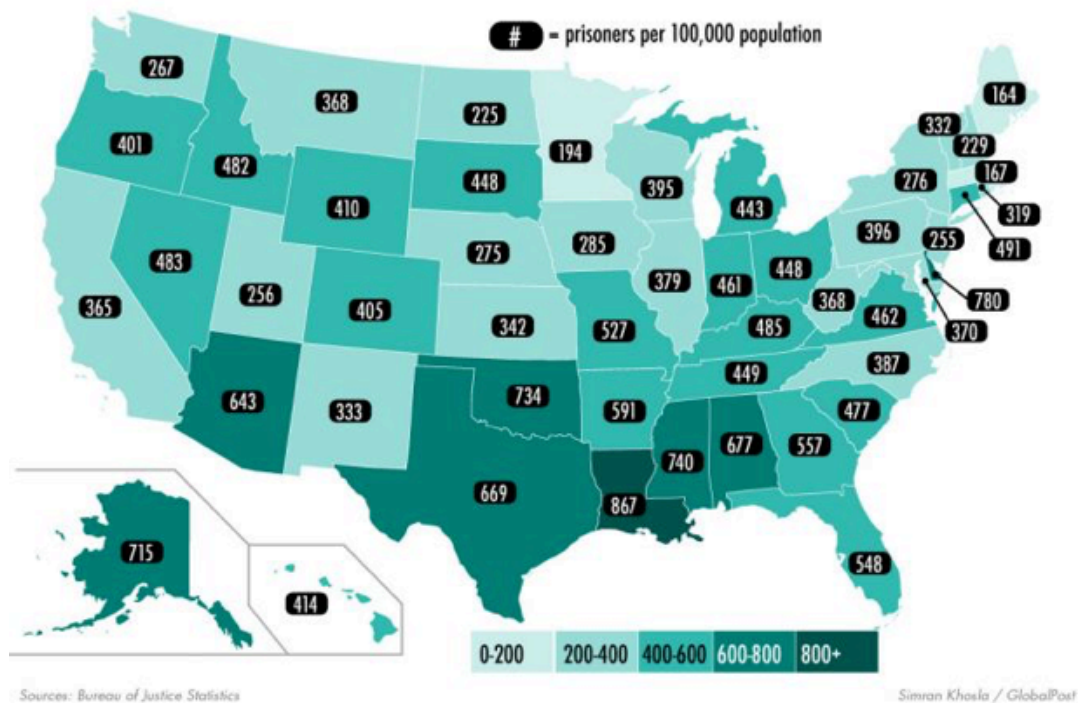
Healthcare for inmates of federal and states prisons in the United States is costly. Healthcare and corrections are growth areas in spending and compete for stagnant state revenues. According to Bureau of Justice Statistics, \$7.7 billion of an overall \$38.6 billion spent on corrections in 2011 (the latest year figures are available) went for inmate healthcare.



In the state of Texas, known for its “wide-open spaces,” there are 31 state prison facilities, operated by the Texas Department of Criminal Justice (TDCJ). Although the TDCJ mission statement does not mention healthcare, a 1976 U.S. Supreme Court ruling (*Estelle v. Gamble*¹) affirmed that all inmates are guaranteed access to basic healthcare services. The high court has long recognized that prisoners have a constitutional right to adequate health care through the Eighth Amendment’s ban on “cruel and unusual” punishment. In the wake of that decision, Texas set up a unique collaboration coordinated by the Correctional Managed Health Care Committee (CMHCC). This includes the TDCJ and two of the state’s leading health sciences centers: Texas Tech University Health Sciences Center (TTUHSC) and the University of Texas Medical Branch (UTMB). The primary purpose of this partnership is ensure that inmates at Texas prisons have access to quality healthcare while managing costs.

Texas has one of the highest incarceration rates in the United States. Nearly 150,000 inmates are serving time in Texas prisons which – for the most part - are in outlying areas.

¹*Estelle v. Gamble*, 429 U.S. 97. <https://www.law.cornell.edu/supremecourt/text/429/97>



Prison operations cost Texas \$3 billion a year. Of that total, the TDCJ spent more than \$581 million on healthcare in 2011. Because of their locations and the risk to anyone taken hostage inside, prisons have had difficulty finding physicians willing to see inmate patients in person. This geographic isolation also creates travel issues and security risks when inmates must be taken to a hospital or physician's office "on the outside." Some expensive medical tests and specialists may only be available in urban areas.

A telemedicine program the size of...

Texas began its corrections telemedicine program in 1994. Since that time, a Pew Charitable Trusts report found that in some measures the health of inmates has improved. And, the introduction of telemedicine technology inside prison walls saved the TDCJ \$780 million during that 14 year period.

A 2008 Gartner study ("A Texas Telemedicine Program Offers Lessons for Governments and Care Delivery Organizations Worldwide"²) found that the savings came from cuts in inmate trips to emergency rooms and doctors' offices and from a reduction in unnecessary medical tests. Telemedicine has enabled the TDCJ to cut back on transfers to outside medical facilities; and it has been successful in weeding out offenders who fake an illness or injury.

According to the former director of telemedicine at the TexLa Telehealth Resource Center in Lubbock, telemedicine has prevented an average of 85% of Texas inmates from leaving prison for healthcare.

²"A Texas Telemedicine Program Offers Lessons for Governments and Care Delivery Organizations Worldwide", Jonathan Edwards, Gartner Industry Research, ID Number: G00157582. June 10, 2008.
http://telehealth.utmb.edu/news/Gartner%20case_study_a_texas_telemed_157582.pdf Viewed on October 13, 2015.

Debbie Voyles³ says the cost of transporting an inmate/patient with two guards plus the vehicle and fuel adds up to about \$350. In 2013, the prisons covered by the TTUHSC reported 9,138 telemedicine encounters with inmates, saving the state an estimated \$3,198,300 that year.

“What we’re doing collectively...no one in the country is doing,”⁴ Dr. Owen Murray told the Dallas Morning News earlier this year. Dr. Murray is the vice-president of offender health services at UTMB. Thanks to the collaborative effort and its success, it has been called a national model. Murray said, “Prison usually flies below the radar, but now everyone needs to find ways to save money in healthcare, and they’re looking at us.”

The director of technical operations for Correctional Managed Care at UTMB believes that the telemedicine program has provided other benefits. Mickey Bourdeau told Healthcare Informatics “from a continuity of care standpoint, [telemedicine] has allowed us to see patients continually, draw on specialists, and beam those specialists to remote prisons where there is no specialty care.”⁵

Voyles says inmates have a choice: they can see a physician via telemedicine or not. If they do, they have to sign a consent form. She says that “very few decline to be seen by telemedicine.” She suggests that the reason inmates prefer telemedicine may be linked to where they are housed within the system. Most inmates want to return to their cells after an outside healthcare trip. If they leave prison for a medical appointment, they might not be allowed to return to their cell unit.

Prison Populations Are Aging

Physicians also have options. They are free at any time to refer patients for a face-to-face visit. And, video visits can save time and money in preoperative and postoperative consultations with remote surgeons.

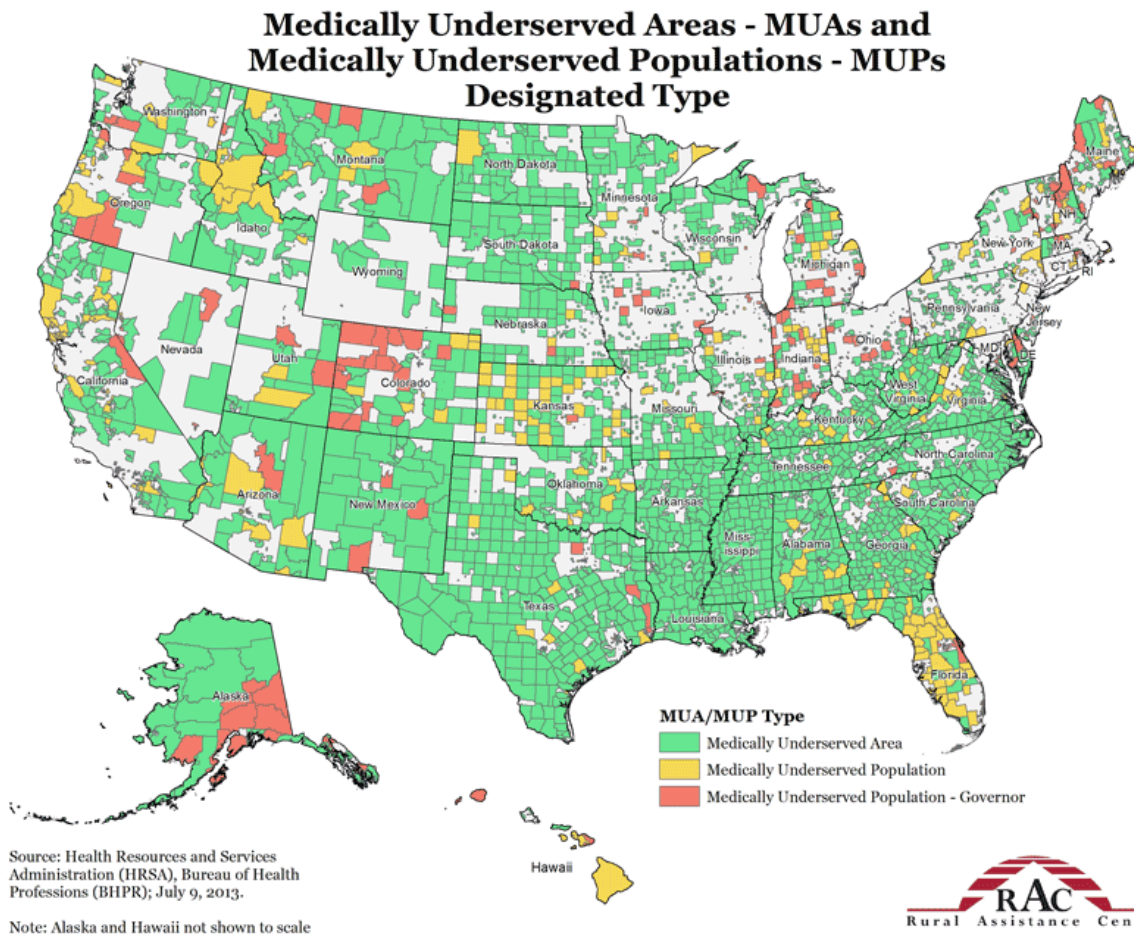
A significant cost factor in prison healthcare relates to the advancing age of inmates. Marcia Schiff, director of Pew’s State health spending project, points out that while the number of prisoners over the age of 55 has increased in most states, Texas has seen a 32% jump in the demographics from 2007 to 2011⁶. Murray notes that Texas has a limited number of “infirmary beds” for older inmates. He says work is underway to see how telemedicine technology can help provide care to those who become extremely ill.

³“Healthcare Without Walls – Telemedicine Corrections and Underserved Areas,” Debbie Voyles’ presentation at the American Telemedicine Association International Meeting and Exposition, Baltimore, Md, May 2014. <https://www.youtube.com/watch?v=rOldvkJv6wk>

⁴Seema Yasmin, “Texas prisons try telemedicine to curb spending,” Dallas Morning News, January 21, 2015. <http://www.dallasnews.com/news/metro/20150119-texas-prisons-try-telemedicine-to-curb-spending.ece> Viewed on October 13, 2015.

⁵Gabriel Perna, “Under the Microscope: Telemedicine Care in Texas Prisons,” Healthcare Informatics, June 21, 2013. <http://www.healthcare-informatics.com/article/under-microscope-telemedicine-care-texas-prisons> Viewed October 13, 2015.

⁶Seema Yasmin, “Texas prisons try telemedicine to curb spending,” Dallas Morning News, January 21, 2015. <http://www.dallasnews.com/news/metro/20150119-texas-prisons-try-telemedicine-to-curb-spending.ece> Viewed on October 13, 2015.



Even though telemedicine does not require the physical presence of providers, the shortage of doctors complicates finding enough physicians, even those in urban areas, who are willing to see a flow of inmates. (In the Rural Assessment Center map above, the areas in green are “medically underserved.”) UTMB recruits retired doctors and specialists who want to practice part-time to work with its full-time staff of providers. “The reality is the shortage of providers is making it essential. [Telemedicine] is another piece of the healthcare service toolset that this country and the world are starting to use to supplement care in larger populations, rural populations, with an insufficient number of practitioners that can’t see all these patients,” Bourdeau says.

Other states have recognized the value of telemedicine in providing healthcare to prison inmates. This includes the state of Mississippi. The University of Mississippi Medical Center has recently become the healthcare provider for the state’s prisons and soon will be in county jails. Dr. Kristi Henderson, Chief Telehealth and Innovation Officer, describes the telemedicine program in her state’s prison as “impactful.”⁷

⁷GlobalMed video report, “Mississippi Corrections Telemedicine,” October 13, 2015. <https://www.youtube.com/watch?v=iXHPNw55dUA>

Eliminating Risk

Attacks on correctional officers and hospital personnel when prisoners are transported to hospitals are an all-too-frequent occurrence. In May 2015, a Ramsey County, Minnesota, jail inmate⁸ attempted to take a deputy's gun in the emergency room at Regions Hospital in St. Paul. Fortunately, the officer was able to retain control of the weapon and no shots were fired.

In July 2013, an emergency room incident turned violent when an inmate⁹ taken to the Massachusetts Eye and Ear Infirmary emergency waiting room struggled with his security guards. When it was over, a Middlesex deputy sheriff was shot in the leg and the prisoner had been shot in the chest.

A corrections officer at Orlando Health in Orlando, Florida, was seriously injured after an inmate¹⁰ attacked her in July 2014. The prisoner assaulted the officer with a lunchroom plate, hitting her in the face and head countless times. After she fell to the floor, the inmate continued beating her with the plate. A second correctional officer and hospital security guards stopped the assault.

A similar incident¹¹ occurred at Allegheny General Hospital in October 2015. A man facing trial for indecent exposure smacked a Pittsburgh deputy in the face with a plate and attempted to take his gun. He had been taken to the hospital after complaining of abdominal pains. During a struggle, the deputy was able to kick the gun away from the inmate who was in shackles.

One of the more horrific attacks occurred in January 2001. Dekenya Nelson¹² was brought to University Medical Center in Lubbock, Texas, after complaining of internal bleeding. At the time, he was serving a 140 year sentence for burglary, car theft and sexual assaults. Nelson took two nurses hostage at the hospital and raped them. Later that year, he agreed to a plea bargain which tacked on an additional 50 years in prison. An internal prison report blamed security lapses by two prison guards and their supervisor. While covered by a blanket in the hospital he was able to unlock his handcuffs with a key hidden in his rectum and fashion a fake gun from a hairbrush.

⁸"Hospital staff in tears after inmate patient attacks deputy, graves his gun." Bring Me the News. Viewed 11/2/2015 <http://bringmethenews.com/2015/05/29/hospital-staff-in-tears-after-inmate-patient-attacks-deputy-grabs-his-gun/>

⁹Colin A. Young, Javier Panzar, Maria Cramer, "A police struggle, shots jolt Mass. Eye and Ear." The Boston Globe, July 31, 2013. Viewed 11/2/2015. <https://www.bostonglobe.com/metro/2013/07/31/police-respond-report-shots-fired-near-massachusetts-eye-and-ear-hospital/B5FOXmq6Mh8Ne9SyA15txl/story.html>

¹⁰WESH-TV Report., "Orange County corrections officer severely injured in inmate attack at hospital." Viewed 11/2/2015. <http://www.wesh.com/news/orange-county-correctional-officer-hurt-in-attack/26872534>

¹¹WTAE-TV Report, "Suspect attacks sheriff's deputy inside Allegheny General Hospital." Viewed 11/2/2015. <http://www.wtae.com/news/sheriffs-deputy-attacked-by-suspect-at-allegheny-general-hospital/36011440>

¹²"Inmate gets 50 years in rape of nurses." The Associated Press/Amarillo Global News. Viewed 11/2/2015 http://amarillo.com/stories/061501/tex_inmategets.shtml#.Vjfb9H6rTRY

Nursing staff, hospital security and even law enforcement often don't know what to do when an inmate is brought to an emergency department for care. Darren Morgan¹³ – Directory of Safety and Security at San Antonio Community Hospital - says that a review of incidents in which an inmate has escaped or caused an incident shows a police officer or corrections officer became a victim and was overpowered by an inmate who took away their weapon and used it on the officer or others.

The other kind of risk is legal. In California, for example, Prison Law Office – a legal watchdog based in Berkeley - has filed lawsuits against numerous California counties over the lack of medical and mental healthcare provided to prisoners. It sued Riverside County¹⁴ on behalf of four inmates. Although a settlement must be approved by a federal judge overseeing the case, the tentative deal will cost the county millions of dollars annually, but the exact cost remains unclear. This is over and above the legal costs involved. The settlement calls for the use of telemedicine for the county's 3,900 inmates. County officials say consultations with doctors and mental health specialists will ease the pressure on jail medical staff.

A review by lawyers for the American Civil Liberties Union and the Public Justice Center in Baltimore claim that city's detention center¹⁵ put detainees at serious risk because of poor care which might be linked to seven deaths since 2013. The two groups are asking a federal court to immediately require the state to improve conditions. According to the assessment, more than three dozen inmate cases included lack of timely medical assessments, interruptions of medications to control diseases such as HIV and diabetes, incomplete medical records, and shortages of supplies of durable equipment. Detainees who had controlled HIV became sick again, diabetics suffered dangerous levels of glucose and those with hypertension had spiking blood pressure.

Government or Private-Run Prisons?

The move away from government-run prisons is increasing. As of 2013, 19% of federal prisoners and 7% of state prisoners were in prisons run by private companies¹⁶. During the period 2000 to 2013, the number of inmates in private prisons rose by 46%.

¹³Robin Hattersly Gray, "6 Common Errors Hospitals, Police Make When Managing Prisoners," Campus Safety Magazine. Viewed 11/2/2015. <http://www.campus-safety-magazine.com/article/6-common-errors-hospitals-and-police-make-when-dealing-with-forensic-patient>

¹⁴Jeff Horseman, "RIVERSIDE COUNTY: Jail health care lawsuit settled." The Press Enterprise, Oct. 30, 2015 <http://www.pe.com/articles/county-784941-settlement-care.html>

¹⁵Meredith Cohn, "Baltimore jail complex again faces lawsuit over health care." The Baltimore Sun, June 3, 2015. <http://www.baltimoresun.com/health/bs-hs-jail-health-20150602-story.html>

¹⁶"FAQ: Civil Justice And Prison Health Care." Center for Justice & Democracy, New York Law School. July 8, 2015. <https://centerjd.org/content/faq-civil-justice-and-prison-health-care>

Stronger laws and mandatory prison sentences have led to higher incarceration rates, straining state and federal budgets. When prison populations rise, so does the cost of providing inmates with healthcare who often enter prison with chronic health conditions and infectious disease. And, because of longer sentences, including life terms without parole, prison populations are aging. With the number of inmates more than doubling between 1999 and 2013, the cost of treating these older prisoners has risen at the same or higher rate – on average two or three times that of younger, healthier inmates.

States that have outsourced prison operations have done so based on the idea that private companies can run them more efficiently and at lower cost. In order to meet a budget, however, inmate health care may be cut, leading to cases of inmate harm and death and ultimately to costly lawsuits. States are not always free of liability when private companies take over prison health care. In some cases, state officials have been held jointly responsible when a private company has been “deliberately indifferent to serious medical needs of prisoners.”¹⁷

Next step

Dr. Murray at UTMB would like to be able to see medical studies like CT scans and MRIs be available to providers when they see inmates. He wants to find a way to provide access to the digital images. “I can get the report, but I can’t see the film itself during a telemedicine encounter, and providers like to look at the images,” Murray says. “This is something we need to work on, so that’s a goal down the road.”

The Gartner study¹⁸ mentioned earlier in this article makes four recommendations for care delivery organizations (CDOs):

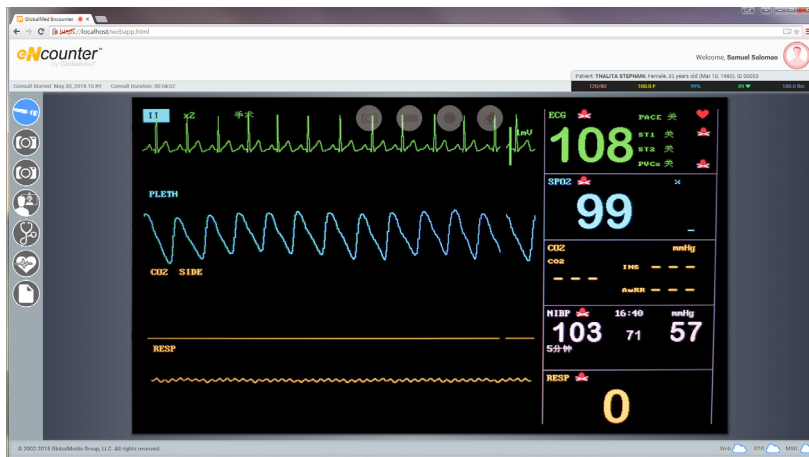
- CDOs that are interested in developing telemedicine services should recognize the potential of telemedicine, not only to cut costs but also to generate revenue.
- CDOs that are interested in offering video [telemedicine] visits should explore the combination of video visits with the use of medical devices for real-time capture of data and images. This makes it easier to replicate an in-person encounter.
- To facilitate clinician adoption of video visits, CDOs must work with clinicians to define protocols for patient assessment and treatment. CDOs can benefit from studying the protocols and policies developed by telemedicine leaders such as UTMB and the U.S. Veterans Health Administration.
- To help justify funding and reimbursement, CDOs should continually monitor the effectiveness of their telemedicine programs and should evaluate them periodically.

¹⁷“See, e.g., Bruce Rushton “Horrific health care: In Illinois prisons, getting sick can be a death sentence,” Illinois Times, June 25, 2015, <http://illinoistimes.com/article-15777-horrific-health-care.html>.

¹⁸Jonathan Edwards, “A Texas Telemedicine Program Offers Lessons for Governments and Care Delivery Organizations Worldwide”, Gartner Industry Research, ID Number: G00157582. June 10, 2008. http://telehealth.utmb.edu/news/Gartner%20case_study_a_texas_telemedic_157582.pdf Viewed on October 13, 2015.

Prison systems in Mississippi, California, Hawaii, Oregon, Texas, Alabama, Florida, Maryland, Nevada and Montana are already following the Gartner Industry Research recommendations by investing in GlobalMed solutions. They've recognized the potential of telemedicine, and while it doesn't produce revenue for them, it does save taxpayer money and lessens risk.

GlobalMed's eNcounter platform provides remote physicians with images and data in real-time with integrated medical devices such as a digital stethoscope, exam camera, video otoscope, ultrasound,



ECG/EKG, spirometer and vital signs monitor. And at the end of a patient session, the software can preserve the data, images and the doctor's report in a facility's PACS server or a cloud service, or in both.



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