

Clinical Digest

CORRECTIONAL HEALTH CARE

Evaluating Prisoners' Health and Health Care

Inmates of U.S. correctional facilities have high rates of serious illness, frequently receive inadequate health care, and often were suffering from untreated psychiatric problems when arrested. Those were the conclusions reached by researchers from the Cambridge Health Alliance, Cambridge, MA after reviewing data from two health surveys conducted by the U.S. Census Bureau for the Bureau of Justice Statistics.

The 2004 Survey of Inmates in State and Federal Correctional Facilities interviewed 14,499 federal prison inmates and 3,686 state prison inmates. The 2002 Survey of Inmates in Local Jails interviewed 6,982 local jail inmates. Using nearly identical methodologies and questionnaires, the surveys asked inmates about their medical conditions and access to medical and psychiatric care. The Census Bureau weighted both surveys in order to yield national estimates.

The researchers found that 38.5% of federal inmates, 42.8% of state inmates, and 38.7% of local inmates had a chronic medical condition. With adjustments for age (the vast majority of inmates were younger than 35), the inmates had higher rates of diabetes, hypertension, prior myocardial infarction, and persistent asthma than the general U.S. population. In addition, the rate of HIV was twice as high among the inmates as among the general population.

Inmates with previously diagnosed mental health conditions comprised 14.8% of federal inmates, 25.5% of state inmates, and 25% of local inmates. Of the inmates who had been treated with a psychiatric medication at some point in their lives, only 25.5% of federal inmates, 29.6% of state inmates, and 38.4% of local inmates were taking such medication at the time of their arrest.

With regard to correctional care, the researchers found that 13.9% of federal inmates. 20.1% of state inmates, and 68.4% of local inmates with persistent medical problems had not received a medical examination since their incarceration. Among inmates with medical problems that require laboratory monitoring, 3.9% of federal inmates, 6.4% of state inmates, and 60.1% of local inmates had not had a blood test since incarceration. In addition, 7.7% of federal inmates, 12% of state inmates, and 24.7% of local inmates had not been seen by medical personnel following a serious injury during incarceration. Among inmates who had been taking a prescription medication immediately before incarceration, 26.3% of federal inmates, 28.9% of state inmates, and 41.8% of local inmates had stopped taking the medication after incarceration. Treatment with psychiatric medication was relatively common, however: 69.1% of federal inmates, 68.6% of state inmates, and 45.5% of local inmates with psychiatric diagnoses had taken such medication since incarceration.

The researchers conclude that U.S. correctional health care needs improvement. As about 12 million inmates are released annually, they say, providing better care for inmates' chronic conditions "may have important implications for community health and in reducing health disparities." The researchers add that the large number of inmates with psychiatric conditions who were not receiving treatment at the time of arrest suggests that community mental health services might reduce crime and incarceration.

One limitation of the study is that inmates' responses to the survey questions were not validated, the researchers say. They note, however, that "the anonymous and confidential nature of the survey should have maximized inmates' candor."

Source: *Am J Public Health*. 2009;99(4):666–672. doi:10.2105/AJPH.2008.144279.

ECONOMIC ISSUES

Do VA Copayments Affect Medication Adherence?

In February 2002, the VA increased copayments on 30-day supplies of drugs from \$2 to \$7. Given that some studies have implicated copayment increases as contributing to patient nonadherence to medication regimens, a group of researchers set out to determine whether the VA increase might have affected veterans' adherence to lipid lowering therapy.

The researchers—from the Philadelphia VA Medical Center (PVAMC) and University of Pennsylvania School of Medicine, both in Philadelphia, and University of Pittsburgh, Pittsburgh, PA—analyzed data on lipid lowering prescription refills for 5,604 PVAMC patients. They identified changes in patients' medication adherence from the two years before the copayment increase to the two years after the increase. Patients were considered to be adherent if they had their medication on hand for 80% of days in a given period, and they were considered

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to have had a continuous gap in medication use if they had no medication on hand for 90 days or longer in a given period.

In order to determine whether adherence changes resulted specifically from the copayment increase, the researchers split patients into three groups according to their copayment burdens. The control group consisted of 495 patients who were completely exempt from copayments. A "some copayment" group consisted of 2,793 patients who were subject to drug copayments for non-service-connected conditions and had an annual copayment cap of \$840. An "all copayment" group consisted of 2,316 patients who were subject to copayments for all drugs and had no annual cap. The researchers also examined

adherence within three vulnerable subgroups: patients at high risk for coronary heart disease, patients with a high medication burden, and elderly patients.

The results, the researchers say, indicate that the copayment increase had an adverse impact on medication adherence. Adherence declined by 11.9% in the control group, by 19.3% in the some copayment group, and by 19.2% in the all copayment group. Continuous gaps increased by 11.7% in the control group, by 24.1% in the some copayment group, and by 24.6% in the all copayment group. Results were similar for the three subgroups of vulnerable patients.

According to the researchers, the VA might be able to increase adherence to lipid lowering medication by adjusting its copayment policies. They suggest that the department charge lower copayments for generic medications, such as the two generic statins that have been available since 2006. In addition, they say, linking copayments to individual patients' needs could "reduce hospitalizations and emergency department use, resulting in total savings of more than \$1 billion annually."

Source: *Circulation*. 2009;119(3):390–397. doi:10.1161/CIRCULATIONAHA.108.783944.