Connecting Offenders to Primary <u>Health Care in Iowa</u>



In Iowa, inmates with chronic behavioral health disorders who cycle

through county jails do not receive any medications at the time of their release. Discontinuing psychiatric medications at the time of release often leads to the underlying illness or illnesses no longer being under control an outcome that could lead to the individual reoffending.

To fill this immediate need upon reentry, the Polk County Jail Behavioral Health Medication Assistance Program was developed by the Iowa Prescription Drug Corporation (IPDC), a nonprofit, safety net pharmaceutical provider. The program connects offenders to primary health care services and provides up to 90 days of behavioral health prescription drug coverage. The additional 90 days of access to free behavioral health medications fills a critical gap until the individual can obtain long-term behavioral health solutions that are available through local behavioral health safety net providers.

At the time of their release, offenders who seek assistance are referred to Primary Health Care, Inc., a federally qualified health center (FQHC) in Des Moines. At the initial visit, the offender receives both a financial and medical evaluation. Patients with household incomes 200 percent of the Federal Poverty Level or below are eligible to receive up to 90 days of behavioral health medications at no cost. Individuals meeting the eligibility requirements are enrolled in the Iowa Health and Wellness Plan (Iowa's Medicaid and Medicaid Expansion Plan).

Regardless of insurance status, insured and uninsured patients alike generally experience a 60- to 90-day waiting period or greater prior to seeing a licensed behavioral health provider due to a shortage of behavioral health professionals in the State. FQHC staff work closely with staff at the local community behavioral health center to ensure the patient's transition to longer-term behavioral health services proceeds as smoothly as possible.

IPDC reimburses FQHC for up to 90 days of behavioral health medications prescribed and dispensed to any safety net patient released from

Polk County Jail Behavioral Health Medication Assistance Program

The Polk County Jail Behavioral Health Medication Assistance Program provides program participants who are leaving the Polk County Jail in Des Moines, Iowa, with access to free psychotropic medications. Participating offenders are diagnosed or recognized from documentation as having mental illness by Polk County Jail staff. At the time of release, individuals who seek assistance are referred to a federally qualified health center in Des Moines where patients are seen by a primary health care provider on an appointment or walk-in basis. Participants are referred to a community mental health center or a regional medical center where longer-term behavioral health services are available during the 90 days of free medication. An initial evaluation of the program indicates a significantly smaller percentage of program participants are recidivating than nonparticipants with mental illness who are released from Polk County Jail. In addition, individual participants go back to jail fewer times after participating compared to prior behavior.

The Polk County Jail Behavioral Health Medication Assistance Program is made possible through funding provided by the Prairie Meadows Community Betterment Grant Program, the Mid-Iowa Health Foundation, the Polk County Board of Supervisors, and the Iowa Prescription Drug Corporation. Initial funding was secured for a two-year period. The discussion in this article is for the first partial year of the grant that ran March through December of 2013. A final report and analysis was submitted to program funders in January 2015. the Polk County Jail. The behavioral health medications are prescribed in quantities of 30 days or less, and dispensed from the 340B pharmacy affiliated with FQHC. Only prescriptions for non-controlled medications are eligible for reimbursement. The 340B Drug Discount Program is managed by the Health Resources and Services Administration Office of Pharmacy Affairs to provide low cost medications to safety net patients. Section 340B limits the cost of covered outpatient drugs to certain Federal grantees, federallyqualified health center look-alikes, and qualified disproportionate share hospitals. The purpose of the 340B Program is to enable these covered entities to stretch scarce Federal resources, reaching more eligible patients and providing more comprehensive services. Utilization of the 340B Program to serve safety net patients released from the Polk County Jail enables limited program funding to provide the greatest benefit possible.

The program became operational March 4, 2013, and filled its first prescription on March 7, 2013. From then through December 31, 2013, 621 separate drug prescriptions were filled for 151 offenders at a cost of \$7.896. The minimum number of prescriptions an individual received was one and the maximum number was 18 over the course of 90 program days. The result is an average of slightly more than four (4.1) prescriptions per individual for the program. These prescriptions consisted of 87 different behavioral health medications.

The Data

Many attempts have been made to quantify the extent to which inmates in both jails and prisons have a mental health problem. The results vary based upon the group conducting the research and the means by which mental health is defined.

The Bureau of Justice Statistics (BJS) at midyear 2005 estimated more than half of all prison and jail inmates had a mental health problem: 56 percent of State prisons (705,600 inmates); 45 percent of Federal prisons (78,800 inmates); and 64 percent of local jails (479,900 inmates). Mental health problems were defined by having one or both of two measures:

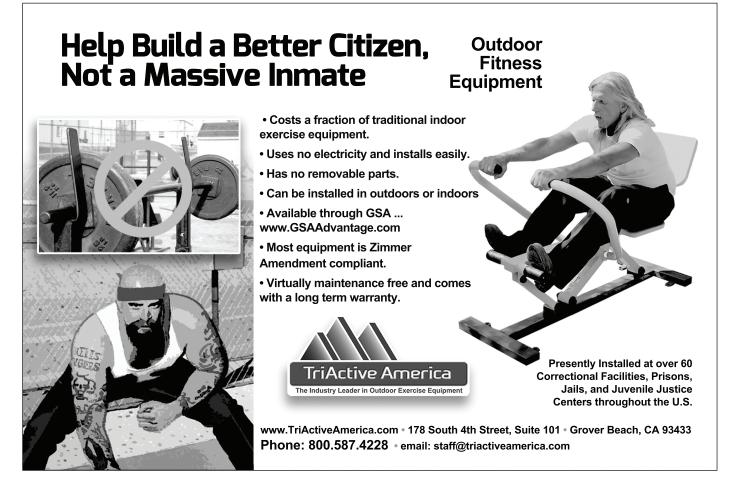
- Recent history or symptoms of a mental health problem, which occurred in the last 12 months.
- Recent history of mental health problems including a clinical diagnosis or treatment by a mental health professional (James & Glaze, 2006).

Polk County's booking data has some striking similarities and differences with the BJS data. The percentage of inmates in the local jail with a recent mental health history varies little between the national survey and Polk County administrative data: 21 percent in the national survey versus 18 percent in Polk County data. In contrast to the national data, only 25 percent of persons booked from July 1, 2008, to January 3, 2014, in Polk County Jail are inmates identified with mental illness using a broader definition that includes symptoms versus 64 percent in the national survey. This definition of the Polk County data uses any one of the following variable categories to flag the inmate as mentally ill in that time interval:

- Doctor diagnoses.
- Self-report by inmate.
- Patient observation.

Although Polk County's percentage of inmates with a mental illness is less than the BJS national survey data, which uses both symptoms and history, it is close to other local estimates of major Midwestern county jails. Currently in Cook County, Ill. (one State to the east of Polk County), it is estimated that 25 percent to 30 percent of inmates are mentally ill (Reynolds, 2014). And Lancaster County, Neb. (one State to the west), in 2005 completed a study in which 29 percent of the population inmates were identified as having a mental illness (Addy & Parker, 2006). Perhaps local jails identify fewer persons with mental illness based solely on symptoms than did the BJS national survey because local jails do not have the resources to screen and observe all their inmates.

To reduce the rates of recidivism in Polk County effectively, offenders identified as mentally ill should be targeted. The 25 percent of Polk County inmates identified as mentally ill (12,356 out of 49,389 total inmates) accounted for 41 percent of the bookings (41,951 out of 101,889 total bookings) in the study period. Of the 12,356 inmates identified as mentally ill, 69 percent of this group are recidivists (8,520 inmates) during the five and one-half year interval. This subpopulation accounts for more than its proportional share of bookings.



Some program participants were very frequent residents of the Polk County Jail. During the past five and one-half years, one individual was booked 22 times, and three individuals were booked 18 times. More than 50 percent of the program participants had been booked four or more times.

Methods

The evaluation of the program performed statistical analyses at two different levels:

- Aggregate level, comparison group design—comparing groups of people and their recidivism rates.
- Individual level, pre-test and post-test design—comparing each individual's pre- and post-program bookings.

To perform the analyses, individuals who had a release date between March 4 and October 5, 2013, were examined so there was enough elapsed time after release (90 days) to test program effectiveness. Within that window, 114 program participants were compared with other groups and themselves. Only 11 of 114 program participants recidivated between entering the program and the end of the year (9.6%). Using the 90-day standard length, the Iowa Department of Corrections (DOC) uses in its comparison group studies, only 9 of 114 (7.8%) recidivated; only two of those nine were participants who obtained all their three 30-day medications.

The two different analyses use two different designs—a comparison group and a pre- and post-test design for the same 114 program participants—in lieu of an experimental or quasi-experimental design to guard against threats to validity. First, the comparison group design discerns whether there is a difference in recidivism between those

Clincher® Extra Wide Inmate ID Wristbands



Contact PDC for FREE samples or request a quote:

800.838.3683

Or visit our new web site: pdcinmateID.com

New Design Engineered for Extra Strength & Durability!

Clincher's new $1 \frac{1}{2}$ " width provides the tightest seal of inmate data, extending the life of the wristband.

- 1/4" wider than original Clincher[®] V & IV Wristbands
- Accommodates up to a 1" insert
- Photo ID, Bar Code, and RFID compatible
- Striped & Solid Options Available in 8 Colors

Visit us at AJA's Jail Expo April 19-21, 2015 Booth #113



who participate in the program and those who do not. Then an individual level pre- and post-test is conducted to bolster the findings of the aggregate comparison group analysis. Statistically significant differences found in any aggregate comparison between groups may simply be due to the people in those groups already being different before any test exposure (program participation in this case). To ensure any difference between the groups is not due to a pre-existing condition, the individual level analysis also compares the behavior of each program participant to see whether that person's behavior was different after the program.

Results

This statistical analysis of the program examining the recidivism among participants was performed following the same overarching research design as the Iowa Department of Corrections Central Pharmacy Pilot Project (Prell, Rosmann, Sorofman, & McCarthy, 2014). A comparison was conducted between different groups of people—program participants and other persons with mental illness in Polk County Jail—to learn if there is a difference in recidivating within 90 days after release. This research design uses the control group-mentally ill inmates who do not participate—as the comparison group to the program participants.

Because of the recent onset of the program, recidivism was limited to the critical first 90 days. Of the 151 participants described in the report, 114 had been out of jail for at least 90 days, through December 31, 2013. There were 3,325 total study subjects, 114 of which were program participants. The research design included three groups in the comparison:

• Program participants who used all three 30-day supplies of behavioral health medications.

- Participants who used fewer than three 30-day supplies of medications.
- Nonparticipants in the Polk County Jail flagged with a mental illness indicator.

Three statistical tests were performed. First, chisquare and Kendall tau tests were performed on a crosstabulation of the groups for statistical significance. Then, a comparison of means was performed using an independent samples t-test to determine whether the means being compared were statistically significantly different.

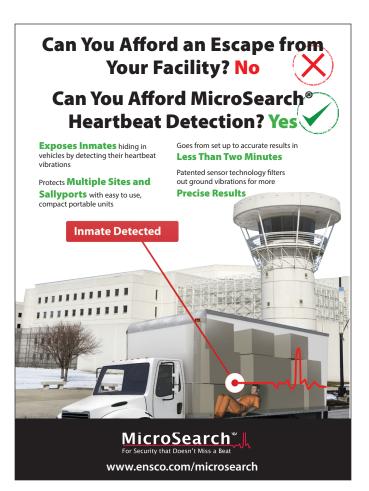
A significantly smaller percentage of participants in the program recidivated compared to the percentage of nonparticipants with mental illnesses who were released from the Polk County Jail. Only 9 of 114 program participants (7%) recidivated during the first 90 days after release. Comparatively, 687 of 3,210 non-participants with mental illness (21%) recidivated during the first 90 days. This finding was consistent for both participants who completed the program—filled all three 30-day prescriptions—and those who did not. The chi-square statistical test (which determines whether a relationship is random or not) is highly statistically significant (.004): This key finding concerning recidivating is not random.

The longer program participants utilize the program, the lower the rate of recidivism is among that group. Of the 114 program participants, 87 individuals utilized less than three, 30-day supplies (90 days) of medication. Of these 87 participants, only 8 individuals (9%) recidivated. Twenty-eight program participants utilized all three, 30-day supplies of medication, the maximum amount of medications available through the program. Of these 28 participants, only one individual (4%) recidivated. There is a positive, linear relationship: The group obtaining the maximum amount of medication available experience increased positive outcomes and the more a group participates in the program the larger the ratio in that group that does not go back to jail (recidivate). According to the Kendall's tau test, this is a highly statistically significant (.000) linear relationship. However, it is a weak one because of low numbers in the comparison groups.

Offenders with mental illness in the Polk County Jail who use the program when they reenter society stay out of jail longer than offenders with mental illness in the Polk County Jail who do not use the program. The final test used an independent sample t-test to determine whether the means per groups being compared were statistically significantly different. Non-program participants flagged with a mental illness indicator who recidivated remained out of jail for an average of 78.2 days. Program participants who utilized less than three 30-day supplies of medication and recidivated remained out of jail for 83.4 days. Program participants who utilized all three 30-day supplies of medication and recidivated, remained out of jail for 88.3 days. The statistical significance in the difference between participant completers and participants who did not use all three scripts was not statistically significant. (This statistical insignificance can be attributed to the small number of respondents being compared.) The statistical significance in the comparison between program completers and other persons in Polk County Jail flagged with a mental illness indicator was highly statistically significant, .000, with completers staying out of jail nearly the entire 90-day timeframe.

Individual Level Comparison

The individual level analysis compares the behavior of each program participant to learn if that person's behavior was different after the program than before the program. For clarity, how the number of bookings is defined needs to be explained. Post-program bookings are relatively straightforward, as are the number of bookings an individual may have in the 90-day period after the release date corresponding to program entry. This is the same 90 days used in the aggregate comparison. Pre-program bookings are the 90 days prior to the booking date that led to program entry. Some program participants had sentences prior to entering the program that extended back in 2012. Hence, those individuals' 90



days prior to booking before going into the program extends much further back into the past than the original March 4, 2013, date for the aggregate comparison.

There is a statistically significant difference at the individual level between pre- and post-program bookings. Using a paired samples t-test to calculate the mean difference between pairs of observations (preand post-program per person), the difference between the preprogram mean (1.31) and the post-program mean (0.122) is highly statistically significant (.000). The paired t-test revealed that:

- Nearly all the people who had one booking prior to the program did not recidivate.
- Most of the people with multiple bookings also did not recidivate.
- Those people with multiple bookings prior to program participation who did recidivate did so less often.

Individual Case Study

One participant was a young female with bipolar disorder. Prior to release, this individual was advised that she could obtain primary care services and up to 90 days of behavioral health medications at no cost. Three days after being released, the individual was seen at Primary Health Care's outpatient clinic. She was in need of risperidone and was worried about her ability to effectively participate in an upcoming job interview. The individual was seen immediately and was provided a 30-day supply of medication. Her condition has stabilized and she is currently working part-time as a certified nurse assistant.

Without access to primary care and behavioral health medications, the individual's disorder may have gone untreated, resulting in a subsequent nonviolent offense. In Polk County, the average length of stay for individuals with behavioral health disorders is 36 days at a cost of \$2,160. As an alternative, the individual is employed and contributes positively to her community.

Implications of the Research

Although more research is needed to determine if the increased access to behavioral health medications will have a long-term positive impact on the rate of recidivism among offenders with behavioral health disorders, preliminary data provided by the Iowa DOC and the Polk County Jail indicates that free access to behavioral health medications is of great assistance to participants' successful reentry into society. The outcomes could potentially be more efficacious, as the Polk County study group underestimated persons with mental illness in the jail compared to national studies, so even more individuals may be assisted.

Preliminary findings from a statewide pilot project established with the DOC and IPDC for individuals with mental illness re-entering society from prison has demonstrated similar results. Through the program's first 9 months, none of the 165 participants had been charged with a violent crime in the first 90 days after release, compared to 1.6 percent of a similar population of severely mentally ill former inmates who were not in the program. The gains were even more pronounced for violating conditions of release. Less than 3 percent of participants suffering from less severe but still chronic mental illnesses had their releases revoked, compared with 11.3 percent of nonparticipants with similar conditions (Addy & Parker, 2006).

Given these positive initial outcomes, the Polk County Jail Behavioral Health Medication Assistance Program will be replicated throughout Iowa. IPDC, in partnership with the Iowa Office of the Attorney General is working to integrate the Polk County Jail model into Iowa's 10 most populated counties. The multiyear initiative will provide a significant amount of data to further determine whether access to free medications can positively

impact rates of recidivism among offenders with behavioral health disorders. Other States have also sanctioned entities similar to IPDC in an effort to efficiently address the rising costs of caring for the Nation's growing safety net population.

References

- Addy, J., & Parker, T. (2006). Lancaster county mental health jail diversion project. American Jails, 20(1), 27-35.
- James, D. J., & Glaze, L. E. (2006, September). Mental health problems of prison and jail inmates. Bureau of Justice Statistics Special Report. NCJ 213600. Retrieved from www.bjs. gov/content/pub/pdf/mhppji.pdf
- Prell, L., Rosmann, J-M., Sorofman, B., & McCarthy, K. (2014, January). *Required report to the legislature:* Central pharmacy pilot project. Retrieved from www.legis.iowa. gov/docs/APPS/AR/923AE102-82CC-4004-B487-146C3FA8BD67/ DOC CentralPharmacyPilot Report 2014 01.pdf
- Reynolds, J. (2014, September 5). Law enforcement copes with mentally ill offenders. Law Enforcement Today. Retrieved from www.lawenforcementtoday.com/2014/09/05/ law-enforcement-copes-with-mentally-ill-offenders/

Jim Addy is President of Mapping Strategies. His prior research experience involved the Iowa Department of Education (IDE) where he oversaw school finance, education research, and information technology. Prior to IDE, he served as the principal investigator on a U.S. Department of Justice site evaluation and a Substance Abuse and Mental Health Services Administration site evaluation. Mr. Addy holds a master's degree in Public Administration from Drake University and a bachelor's degree in Specialized Studies from Cornell College. He can be contacted at jim.addy@mappingstrategies.com.

Jon-Michael Rosmann is the Executive Director of the Iowa Prescription Drug Corporation (IPDC). Prior to joining IPDC, he served as Vice-President and CFO of the public policy consulting firm, State Public Policy Group, Inc. Mr. Rosmann also serves as President of the Iowa Rural Health Association. He can be contacted at jon.rosmann@iowapdc.org.