Integrated Primary and Behavioral Health Care in Patient-Centered Medical Homes for Jail Releasees With Mental Illness

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INTEGRATED PRIMARY AND BEHAVIORAL HEALTH CARE IN PATIENT-CENTERED MEDICAL HOMES FOR JAIL RELEASEES WITH MENTAL ILLNESS

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Many jail releasees have persistent physical and mental health needs that are frequently unaddressed, leading to high rearrest rates and return to jail. This article details the potential benefits and challenges of integrated health services during transition planning and return to the community and details lessons learned from a pilot program in Houston, Texas. It examines how patient-centered medical homes, a modality supported by policy changes at the federal level, provide one means of effective transition from jail to the community that integrates behavioral health services with primary care. Evidence from the pilot program suggests that effective integrated health services for jail releasees can help divert individuals from a cycle of recidivism.

Keywords: jail reentry; patient-centered medical home; diversion; transition planning; integrated health care

An urgent need for accessible health and psychosocial services exists for offenders released from jail and reentering society. Jails are overcrowded and face challenges in providing comprehensive services. On reentry, offenders encounter numerous barriers to accessing adequate community-based services. These barriers are even greater for releasees who are homeless and mentally ill. Yet high rearrest rates make it critical to support successful community integration for jail releasees. The provision of accessible and comprehensive health and psychosocial services can help to reduce recidivism.

This article focuses on physical and behavioral health needs of jail releasees. It examines one means of effective transition from jail to the community that integrates behavioral

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health services with primary care, a modality supported by policy changes at the federal level. In particular, it examines the potential benefits and challenges of integrating health services during transition planning for released detainees and details lessons learned from a pilot program in Houston, Texas. Evidence suggests that effective integrated health services for jail releasees can help divert individuals from a cycle of recidivism.

PHYSICAL AND BEHAVIORAL HEALTH CARE NEEDS OF JAIL DETAINEES

The jail population has a prevalent need for mental health services during detention and transition back to the community (James & Glaze, 2006; Steadman, Osher, Robbins, Case, & Samuels, 2009). A study of five jails found that 14.5% of male and 31.0% of female detainees in jail exhibit symptoms of serious mental illness (Steadman et al., 2009), as compared to 5.4% of the general population (Kessler et al., 1996). But adequate community-based services can be difficult to access because of financial and other barriers (Honberg & Gruttadaro, 2005). Some have argued that this lack of access to outpatient care has resulted in a system that criminalizes mental illness, in that a percentage of detainees failing to receive community mental health treatment are instead jailed for behavior related to their untreated psychiatric disorder (Lamb, Weinberger, & Gross, 2004). Several recent studies question this hypothesis, finding that only a small percentage of those incarcerated with mental illness fit this criminalization model (Junginger, Claypoole, Laygo, & Crisanti, 2006; Peterson, Skeem, Hart, Vidal, & Keith, 2010). Regardless of whether their alleged offenses were driven by psychiatric conditions, it is clear that a significant proportion of jail detainees have a severe mental illness.

In addition to behavioral health challenges, jail detainees have a disproportionate number of chronic diseases, including hypertension, asthma, and arthritis (Binswanger, Krueger, & Steiner, 2009) as well as communicable diseases such as AIDS, tuberculosis, hepatitis B, and hepatitis C (K. Brown, 2003; Hennessey et al., 2008; National Commission on Correctional Health Care, 2002).

Physical and behavioral health conditions often coexist and have an interrelated relationship (Anderson, Freedland, Clouse, & Lustman, 2001; Dickens, McGowan, Clark-Carter, & Creed, 2002; Frasure-Smith, Lesperance, Juneau, Talajic, & Bourassa, 1996; Frasure-Smith, Lesperance, & Talajic, 1993; Kessler, Ormel, Demler, & Stang, 2003). Chronic physical health conditions such as diabetes and asthma are correlated with behavioral health conditions such as depression and anxiety disorders (Anderson et al., 2001; Dickens et al., 2002; Frasure-Smith et al., 1996; Kessler et al., 2003). According to Anderson et al. (2001), individuals with diabetes are twice as likely as those without diabetes to have depression. Without adequate treatment for behavioral health conditions, consumers face a poorer physical health prognosis and an increased risk of death (Fraser-Smith et al., 1993; Katon & Sullivan, 1990). Physical health conditions, including cardiovascular disease, diabetes, and respiratory conditions, are also more prevalent for individuals with serious mental illness (Parks, Svendsen, Singer, Foti, & Mauer, 2006). This population faces a number of risk factors that increase vulnerability, deteriorate health, and shorten life span (Allison et al., 1999; Herra et al., 2000; Parks et al., 2006). Risk factors may include modifiable behaviors such as tobacco and alcohol use and psychosocial factors such as homelessness, incarceration, unemployment, and poverty.

The risk of a co-occurring physical health issue can be greater for jail detainees than the general population. Swartz, Alaimo, and Kiriazes (2011) examined the presence of chronic

disease among jail detainees who were receiving residential psychiatric services. They found increased rates of epilepsy or seizures, severe or frequent headaches, strokes, and chronic lung disease as compared to the general population. In addition, intravenous drug users who are in jail have higher rates of some communicable diseases than their nonincarcerated counterparts (Weinbaum, Sabin, & Santibanez, 2005). Individuals with serious mental illness and past incarceration experience a 40% increased risk of medical conditions and a 30% increased risk of multiple medical conditions compared to those without past incarceration (Cuddeback, Scheyett, Pettus-Davis, & Morrissey, 2010).

Detainees with a mental health diagnosis disproportionately have other challenges as well. A 2003 study by the Substance Abuse and Mental Health Services Administration (2004) found that 21% of adults with a serious mental illness engaged in either substance dependency or abuse as compared to 8% of other adults. Conversely, adults using illicit substances were two times more likely to have a serious mental illness than those not using illicit substances. The presence of a mental illness can also correlate with poor psychosocial functioning: 17% of jail detainees with mental illness had been homeless at least once during the year prior to arrest, in contrast to 9% of those without mental illness (James & Glaze, 2006). Addressing the needs of jail detainees with mental health challenges can be a productive way to divert these individuals from a cycle of reoffending and reincarceration.

CHALLENGES OF TRANSITION FROM JAIL TO THE COMMUNITY

Jails can be the most consistent source of behavioral health care for detainees who have a co-occurring condition and are homeless (Osher, Steadman, & Barr, 2002). In fact, in a number of major metropolitan areas such as Houston, Los Angeles, Chicago, and New York, the county jails have more beds for psychiatric patients than do local hospitals (Harris County Sheriff's Office, n.d.; Torrey, 1999). Although jails are legally mandated to provide needed health services to detainees during their incarceration, the range and quality of health and mental health services vary greatly between jails (Stephan, 2001), particularly by the size of the jail (Steadman & Veysey, 1997). Jails are overcrowded as a result of lengthened sentences, a higher number of offenses leading to jail time, and restrictions on prison volume that lead those awaiting a prison bed to remain in jail for longer periods (Martin & Katsampes, 2007). Overcrowding increases the difficulty of supervising detainees appropriately and running the jail effectively (Martin & Katsampes, 2007). An additional challenge to jails is that detainees' legal and practical circumstances vary widely. Jails hold detainees

> to receive and process people arrested and taken into custody by law enforcement, to hold accused law violators to ensure their appearance at trial, to hold offenders convicted of lesser offenses—usually misdemeanors, but also low-level felonies in some jurisdictions—as a court-ordered sanction, to hold individuals remanded by the court for civil contempt, [and] to hold offenders for other jurisdictions or those awaiting transfer to prison or other facilities. (Martin & Katsampes, 2007, p. 1)

In addition, violators of probation, parole, and bail bond compose a part of the jail population (Cunniff, 2002; Minton, 2011). The diverse reasons that individuals are detained lead to a wide range of needs (Martin & Katsampes, 2007), which jails are able to address only to varying degrees (Stephan, 2001).

On release, many jail detainees have a range of health and psychosocial needs such as housing, financial and food security, and employment. Existing risk factors are exacerbated

when adequate medications and services are inaccessible on release (Osher et al., 2002), and behavioral health conditions experienced by this population are commonly untreated in the community. The challenges faced by recently released offenders who are seeking specialty behavioral health services can prevent them from accessing these services in a timely manner. Under such circumstances, treatment may not occur until an individual reaches a crisis state and ends up in an emergency center or is rearrested. Furthermore, it is often individuals who are higher functioning who are able to navigate the complex and overburdened public mental health care system, whereas those who are more severely impaired fall through the cracks. Cycling between the streets and jails is detrimental for individuals, as abrupt revocation or rearrest and lack of continuity of care risk rapid deterioration of mental and physical health. Continuity of services can be challenging, but reentry is a key opportunity to break a persistent cycle of repeated incarceration, release, decompensation, and rearrest (Solomon, Osborne, LoBuglio, Mellow, & Mukamal, 2008). Within a year of release, about 25% of detainees return to jail, and more than half of these are under formal supervision when rearrested: 34% are probationers, 13% are parolees, and 7% are released on bail or bond (Beck, 2006). Better transition planning and community-based services for jail releasees would provide a key opportunity to reduce this recidivism.

Planning for the transition of jail releasees back to the community is an essential step in the reentry of offenders (Osher, 2007; Osher et al., 2002). Once an individual is released, it is beyond the scope and available resources of the correctional facility to continue providing health—or other—services (C. Brown, 2011; Osher, 2007). Without proper planning on discharge, many detainees will struggle to overcome barriers to successful reentry, including lack of housing, employment, child care, financial resources, and transportation, as well as physical and behavioral health care (Osher, 2007; Osher et al., 2002). Yet key elements of the jail environment impede the planning and implementation of a smooth transition. Detainees often have brief lengths of stay, with 80% staying for one month or less (Beck, 2006). The timing of release is typically unpredictable, limiting the ability of detainees to prepare for the transition (Draine, Wilson, Metraux, Hadley, & Evans, 2010). Jail staff spend significant time transporting detainees to court appearances and coordinating with multiple other entities, such as probation and parole agencies, law enforcement, prosecutors, and state correctional facilities (Martin & Katsampes, 2007). These time-consuming duties, along with limited resources and brief stays, can make transition planning a challenge for jails. Transition planning for jail inmates with mental illness has a history of being inadequate and, often nonexistent (Steadman & Veysey, 1997).

CASE PRESENTATION: JAIL INREACH PROJECT OF HEALTHCARE FOR THE HOMELESS–HOUSTON

Primary care is a key portal to behavioral health care. About half of people seeking behavioral (mental health and substance abuse) health care go to primary care physicians (PCPs) rather than psychiatrists or other behavioral health specialists (Wang et al., 2006). For this reason, PCPs have a unique opportunity to diagnosis, treat, and coordinate care for a wide range of conditions. Providing behavioral health services in the primary care setting has been shown to produce positive outcomes for both mental and physical health as well as reduce health disparities (Watt, 2009), improve quality of care, and decrease use of

hospitals and emergency centers, thus lowering overall health cost (Grumbach & Grundy, 2010). Researchers highlight the importance of integrating mental health and substance use services (Haimowitz, 2004; Lurigio, Rollins, & Rollins, 2004) or physical and mental health services (Osher et al., 2002) for a jail population.

Healthcare for the Homeless–Houston (HHH) was established in 2001 with a specific focus on integrated primary and mental health care for homeless individuals in Houston, Texas. HHH operates three integrated health clinics that provide comprehensive health services at no cost to individuals who are homeless. The clinics are housed within existing agencies providing homeless services and shelters as a mechanism for reaching a broad client base who may not seek health services outside of jails or emergency centers unless clinical services are embedded within agencies that provide essential basic needs, such as housing and food. Clinic sites include a day resource center with no related overnight shelter, a day resource center that is connected to a transitional living center, and a men's shelter. HHH employs 34 staff members, with many of the providers rotating between clinics. In 2010, 10,170 adults and children who were homeless received health and support services at HHH. Medical visits were provided to 4,392 individuals, and 1,051 patients received dental care. Other services provided by HHH include medical case management and a transportation program that links individuals to a number of homeless service agencies.

In 2002, HHH became Houston's second federally qualified health center (FQHC). FQHCs receive a number of advantages, including eligibility for certain federal grants and programs, enhanced Medicaid and Medicare reimbursement, and preferential drug pricing (Rural Assistance Center, 2010). HHH benefits from only some of these advantages, as it does not currently receive reimbursements through Medicaid or Medicare (less than $1,300 in 2010), and the vast majority of HHH patients have no form of insurance (97% of those seen at HHH in 2010). To qualify as an FQHC, a number of requirements must be met. The requirements include a location in an area deemed "medically underserved," service to individuals of all ages, direct or indirect comprehensive health services (physical, behavioral, dental, pharmaceutical, etc.), and transportation options for consumers. Individuals cannot be denied care because of an inability to pay for services. FQHCs have a board of directors composed of at least 51% of consumers of the services (as an FQHC serving a special population designated as particularly vulnerable, HHH has an exemption from some of the requirements and instead employs a Consumer Advisory Board that has voting rights on the governing Board (Rural Assistance Center, 2010).

PROJECT OVERVIEW

In 2006, the Jail Inreach Project was initiated by HHH in collaboration with the Harris County Sheriff's Office and the Mental Health and Mental Retardation Authority of Harris County, the local mental health authority in Houston. The first patients were seen in January 2007. The program was established to serve releasees because growing numbers of individuals who were homeless and had a behavioral health diagnoses were rapidly cycling through the Harris County Jail. Over time, the proportion of jail inmates consuming mental health services while incarcerated grew to the point that the Harris County Jail became the largest inpatient provider of mental health services in Texas and the second largest in the nation (Harris County Sheriff's Office, n.d.). Historically, follow-up care at

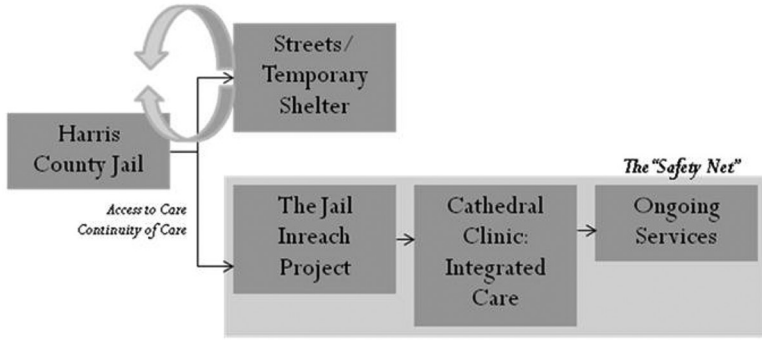

Figure 1: The Safety Net

release was lacking, and detainees typically were discharged during the early hours of their release day without necessary prescriptions, medications, or provisions for continuity of care. Poor outcomes and high recidivism underlined the need for coordination of medical and behavioral health services, with provisions of housing services, to reduce the likelihood of return to homelessness and rearrest.

The Jail Inreach Project aims to (a) prevent the rapid deterioration of mental health status on release from jail, (b) reduce rearrest rates and combat the rapid cycling of homeless individuals with mental illness through the Harris County Jail, and (c) develop a more coordinated system of care that improves access to needed primary and behavioral health services (see Figure 1). Potential participants are referred through several mechanisms: jail staff (including health care providers), other inmates, the local mental health authority case managers, family or friends, former or current participants, and themselves. Three case managers are employed by HHH's Jail Inreach Project to provide prerelease transition planning services as well as care coordination and intensive case management after release. Program participants have the option of staying in jail a few additional hours to have a daytime release directly to the care of their case manager, who meets them at the jail at the time of discharge and walks with them to the HHH clinic located a few blocks from the jail. This coordination prevents releasees from immediately returning to the street and decreases the probability of psychiatric treatment dropout, hospitalization, and rearrest. Data indicate that clients who choose "self-release" rather than being released to the direct care of their case manager are six times less likely to show up for their primary care appointment on release (Buck, Brown, & Hickey, 2011). HHH considered mandating direct release as a requirement of the program. It decided, however, that although individuals opting for self-release are less likely to follow through with care, some are successfully linked to services and excluding them would contribute to lack of continuity and access to essential health services.

The first step on every client's plan after release is to receive primary care services (which includes behavioral health care) at the HHH clinic that houses the Jail Inreach Project, which is colocated at a day resource center called the Cathedral Clinic. Provided services include primary care, intensive medical case management, individual and group counseling, psychiatry (including telepsychiatry), and substance abuse counseling, as well

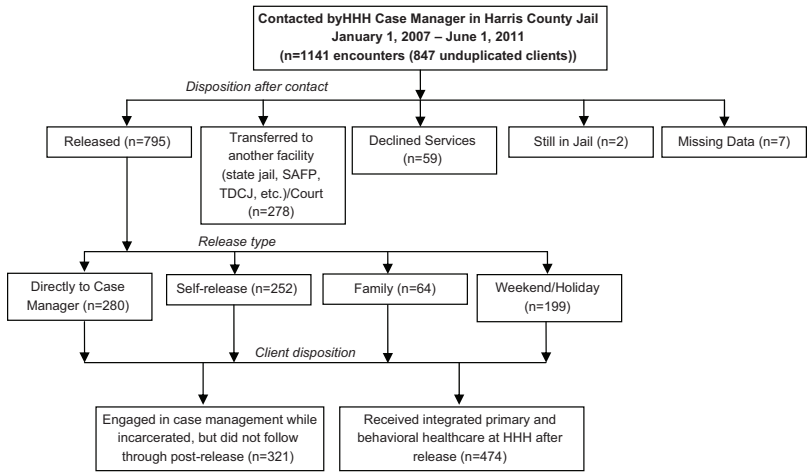

Figure 2: The Jail Inreach Project Program Roadmap

as dental and ancillary services. The case manager refers clients into needed services not provided by HHH, such as inpatient substance abuse treatment and other systems of long-term care. Coordinated services are specific to an individual's needs and may include housing, employment, obtaining government benefits and/or identification, help with completing applications for benefits, and other services as deemed necessary. If a releasee, for example, experiences physical or cognitive impairments, a case manager can accompany this person to appointments with other providers. However, for some releasees, a less involved referral process may be adequate.

Primary care and behavioral health providers work together with the patient in the same room or with "warm" handoffs given by way of direct introduction. When the services of multiple providers are interrelated, the patient and providers work together to set common goals. The majority of behavioral health care is provided by the primary care clinician. But given the acuity and severity of the patients' behavioral health problems, behavioral health specialists serve to collaborate and provide specialized treatment in conjunction with the primary care services. All health services are initially provided by HHH, with the intention of transitioning participants into long-term care within an existing health care system, such as the Harris County Hospital District's community clinics. HHH utilizes goal negotiated care (GNC), a model of care that has been used in the social sciences but rarely in medicine. The basis of GNC is to empower patients by placing them in an active role in their treatment, on the assumption that if individuals are invested in their health care decisions, they are more apt to adhere to treatment regimens, make better health decisions, and break the cycle of reinforced learned helplessness (Rochon, Buck, Mahata, & Turley, 2006).

The overall goal is for individuals to have an established "health home" and a regular PCP, which is achieved by working with patients to obtain some form of health insurance. For individuals unable to transition into larger systems of care because of impaired functional ability or other reasons, ongoing care is provided by HHH.

Figure 2 illustrates the jail releasees approached by the Jail Inreach Project from January 1, 2007, through June 1, 2011.

METHOD

DATA AND SAMPLE

HHH developed an online database to track release dates, diagnoses, initial referral plans, post-release service linkages, and the status of individual cases. This database tracks client information and data in a way that is accessible to multiple staff members and available for research and evaluation purposes. It is used to produce reports for quality assessment and evaluation, with ongoing program evaluation designed to inform best practices and procedures for the program.

In addition, HHH uses an electronic health record to track all services it provides. The record tracks the number of unduplicated homeless persons who receive care at the three HHH primary care clinics. These numbers are compiled monthly, in addition to the number of encounters (defined as each individual clinic visit) and units of service (defined as each service provided during a clinic visit), and are compared to numbers for the same period in the previous year with regard to progress toward goals. They are reviewed by the Board of Directors at each of its meetings. A Uniform Data System, used by all FQHCs in reporting to the Bureau of Primary Health Care, provides additional metrics for tracking demographics, productivity, and progress on specific health status indicators reported annually. Detailed data are tracked for the Jail Inreach Project and include demographics, diagnoses, numbers of inmates contacted in jail, numbers who are linked to services after release, numbers who declined services, and numbers still in jail pending release or who transferred to another facility.

In 2009, HHH worked with the local mental health authority and the Harris County Sheriff's Office to conduct a preliminary evaluation of the Jail Inreach Project (Buck, Brown, & Hickey, 2011). From its start in January 2007 through June 26, 2009, 492 people had been referred to the project and 275 had been linked with post-release services. At the inception of the program, a memorandum of understanding was signed with the Harris County Jail and the local mental health authority for access to client medical records within the jail. The preliminary evaluation reviewed the records of all clients who had been engaged in the program for at least a year prior to June 26, 2009. These records were matched with Harris County Jail arrest records. Researchers used the following inclusion criteria for program participants: (a) released from jail 1 year or more prior to the study date, (b) agreed to participate in the after-release program, (c) recorded identifiers correctly permitted match to the criminal justice (JIMS) database, (d) matched criminal histories preceded program entry, and (e) not transferred to another facility (e.g., prison), thereby reducing exposure to risk of reoffense. These inclusion criteria yielded a study sample of 150 clients. JIMS arrest records for each participant were summarized into five indicator variables: (a) bookings (the number of unique jail stays for the individual, which often corresponded to multiple charges), (b) charges (the complete number of criminal charges brought against the participant), (c) felonies, (d) misdemeanors, and (e) jail days (the number of days spent in jail unduplicated across overlapping sentences).

A comprehensive evaluation using the same methodology and structure as described above for the initial evaluation was recently conducted using data from a broader time span of inception through April 14, 2011 (see table 1). Over that time period, 840 individuals had been referred to the program, with 490 successfully linking to services post-release.

TABLE 1: Study Sample Size Comparison for Preliminary and Comprehensive Evaluations

	Preliminary Evaluation (1/1/07–6/26/09)	*Comprehensive Evaluation (1/1/07–4/14/11)*
# individual cases referred	492	840
# successfully linked to postrelease services	275	490
# study sample	150	207

TABLE 2: Ten Most Frequent Lifetime Offenses

	Frequency	*Percent*
Trespassing	156	17.43
Prostitution	138	15.42
Possession of a controlled substance penalty Group 1 < 1g	131	14.64
Theft under $1,500	69	7.71
Assault	33	3.69
Public intoxication	30	3.35
Possession of marijuana 0–2 oz.	23	2.57
Motion to revoke parole	20	2.23
Manufacture or delivery of a controlled substance	19	2.12
Failure to maintain financial responsibility (automobile insurance)	14	1.56
Subtotal	633	70.73
Total	895	100.0

Researchers created a study sample based on the same inclusion criteria as in the preliminary evaluation, resulting in a sample size of 207. Table 4 indicates the disposition of participants after receiving at least one jail visit.

The sample of 207 included 105 females (50.7%) and 102 males (49.3%) with a mean age at first contact of 39.31 years (SD = 10.32 years). The vast majority (180 of 207 or 87.0%) were diagnosed with substance abuse. More than one third of the sample (79 of 207 or 38.2%) had affective disorders including depression, bipolar disorder, and other mood disturbances. Schizophrenic disorders and other psychoses were diagnosed in 40 or 19.3% of this sample. Other mental disorders were noted among 20 participants (9.7% of the sample). Clinic visits were made by over half of participants (see Table 3).

Participants had recorded an average of 4.10 lifetime bookings (SD = 2.64) divided between felonies (mean lifetime charges per person = 1.57, SD = 1.57) and misdemeanors (mean lifetime misdemeanors charges per person = 3.19, SD = 3.04). The 10 most frequent categories of lifetime criminal charges for this group are presented in Table 2. The three most frequent groupings were charges for trespassing offenses, prostitution, and drug-related offenses.

MEASURES

Four dependent measures were analyzed as a means of assessing rearrest rates and community impact: the total average annual bookings into the Harris County Jail, the total number of charges per year, the average number of felonies per year, the average number of misdemeanors per year, and the average days in jail per year. These measures were separated into comparison categories by dividing the study span into two periods for each participant: preengagement and postengagement. The preengagement phase extended backward 1 year from the date of the index arrest (which corresponded to the incarceration

TABLE 3: Descriptive Statistics

	N	*Min*	*Max*	*M*	*SD*
# jail visits	207	1.00	8.00	2.4010	1.29922
# clinical visits	124	1.00	21.00	3.9113	3.76335
Valid *n* (listwise)	124				

TABLE 4: Disposition Category

	Frequency	*Percent*
Declined services after one or more jail visits	9	4.3
Engaged in services in jail, but did not follow through after release	62	30.0
Successfully linked to community services after release	136	65.7
Total	207	100.0

during which the respondent agreed to participate in the program). The postengagement phase began on the date of jail release for the index incarceration and continued for 1 year.

ANALYSES

These four outcome indicators were submitted to repeated measures analyses of variance to test for the significance of observed changes. Because age is a documented influence on criminal justice involvement, an age-group factor was constructed by median split (median age = 39.32 years), allowing a contrast between younger and older participants' outcomes. The resulting design was a 2 × 2 (Age × Measurement Interval) repeated measures analysis of variance.

RESULTS

The preliminary evaluation showed that more than half of jail releasees referred to the Jail Inreach Project continued with services after returning to the community, as opposed to less than one third of releasees not participating in the program (Buck et al., 2011).

For this comprehensive study, the group of participants received an average of 2.40 visits from HHH staff members while still incarcerated and averaged 3.91 clinic visits after release.

Analysis revealed that overall, 65.7% of the study sample who were approached by an HHH case manager while incarcerated and agreed to participate were linked to community health and social services post release via the Jail Inreach Project.

Participants fail to be linked to services for a variety of reasons, including being transferred to other facilities, not yet being released from jail at the time of these findings, and not following through with the program after release. The analysis also showed that the program reduced recidivism, with the total average annual bookings per person into the Harris County Jail decreasing by 57.1% from 1.63 to 0.7 and the total number of charges per person decreasing 57.4% from 1.66 charges to 0.71 charges per year. The total number of average felonies per year decreased by 71.0% from 0.62 to 0.18, and the total average misdemeanors decreased by 49.5% from 1.03 to 0.52 (see Chart 1). Consequently, the

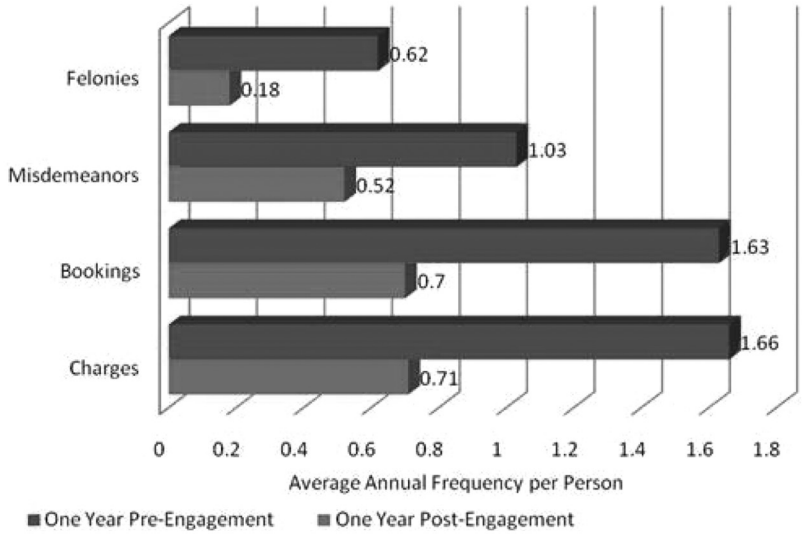

Chart 1: Summary of Results From January 1, 2007, to April 14, 2011

TABLE 5: Multivariate Test Values for Repeated Measures ANOVAs

	Value	F	*Hypothesis* df	*Error* df	*Sig.*
Felonies	.206	53.172	1	205	.000
Bookings	.226	59.903	1	205	.000
Misdemeanors	.092	20.889	1	205	.000
Charges	.230	61.369	1	205	.000

program reduced demands on the jail through a 28.4% reduction in the average days in jail per person per year, from an average of 67 days to 48 days.

Each of the four tests of main effects reached yielded probabilities below the $p = .05$ threshold, indicating the likelihood that observed changes in outcome indicators from pre- to postengagement represent significant differences from a statistical point of view. The values of the main effects from the four separate analyses are presented in Table 5.

None of the tests of the age group factor reached statistical significance, nor did any of the interaction effects between age group and measurement interval. The tests of interaction effects for the bookings and charges indicators, however, both yielded marginally significant results. For the Bookings × Age Group interaction, the F test value of 2.852 ($df = 1$) was associated with a probability of .093. A graph depositing the mean values for this interaction is presented in Chart 2. There was a trend for older respondents to improve more.

Similarly, the Age Group × Charges interaction yielded a marginally probable F value of 2.802 ($df = 1$, $p = .096$). As in the interaction above, older participants tended to benefit more from the intervention than did younger service recipients. The mean values are depicted in Chart 3.

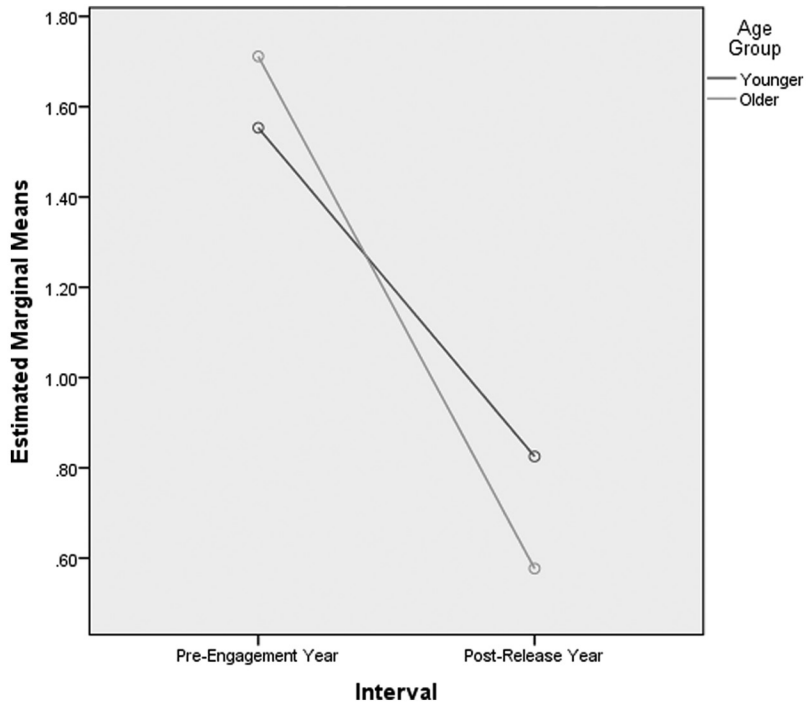

Chart 2: Estimated Marginal Means of Bookings per Person

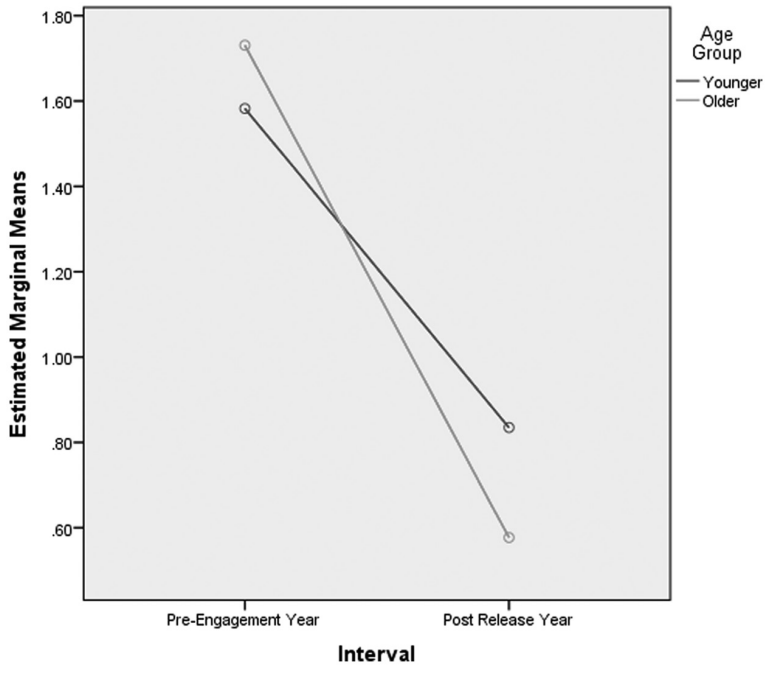

Chart 3: Estimated Marginal Means of Charges per Person

DISCUSSION

The Jail Inreach Project provides services that yielded positive findings for homeless individuals who are released from jail. The need for coordinated and comprehensive primary and behavioral health services is demonstrated by the rates of substance abuse (87%), affective disorders (38%), and schizophrenia or psychosis (19%) among the sample population. Significant reductions in charges and bookings were found for this population after participating in the program for 1 year as compared to a year prior to the jail stay in which they connected with the Jail Inreach Project. Program participants experienced significantly fewer charges overall, with a reduction in misdemeanor and felony charges. As expected with a reduction in charges, the number of actual bookings into jail was also found to decrease significantly.

The findings of this study demonstrate promising results for individuals receiving comprehensive health and social services during the reentry process. Osher (2007) emphasizes the importance of key elements in the transition process that include collaboration of correction and community entities, assessment of health and psychosocial needs, and adequate prerelease planning to meet these needs. The Jail Inreach Project aligns with Osher's recommendations through collaboration not only with the Harris County Jail but also with the Harris County Sheriff's Office and the local mental health authority. Meeting with potential participants in the jail also helps to bridge the transition process, as the relationship with a case manager and the assessment of needs begins in the jail before release. On release, participants reduce the risk of failing to access services as well as rearrest through making their first point of contact the case manager, who escorts them to the HHH clinic. The ability of HHH either to provide or coordinate a multitude of services enables participants to receive treatment and tools that foster a productive transition process.

The model exemplified by the Jail Inreach Project is particularly timely in the current policy environment. Specifically, concern over access to and quality of health care is firmly reflected in the Patient Protection and Affordable Care Act (PPACA), which was passed in March 2010 (Chaikind, Copeland, Redhead, & Staman, 2011). The PPACA places an emphasis on primary care and reforms related to supporting patient-centered medical homes (PCMHs; Safety Net Medical Home Initiative, 2010). The PPACA views PCMHs as a means of serving consumers with high needs (Section 3021) through facilitating access and quality (Section 5405) as well as adjusted reimbursement approaches for comprehensive services (Section 3021). The integrated health care PCMH model adopted by the Jail Inreach Project is especially pertinent to the releasee population, which faces substantial barriers to services.

The PPACA promotes PCMHs as a model of care including the following:

> (A) personal physicians;
> (B) whole person orientation;
> (C) coordinated and integrated care;
> (D) safe and high-quality care through evidence informed medicine, appropriate use of health information technology, and continuous quality improvements;
> (E) expanded access to care; and
> (F) payment that recognizes added value from additional components of patient-centered care. (PPACA, Title III, Subtitle F, Section 3502(c)(2))

These six elements echo joint principles established in 2007 by the American Academy of Pediatrics, the American Academy of Family Physicians, the American Osteopathic Association, and the American College of Physicians (Patient-Centered Primary Care Collaborative, 2007). These principles were adopted by the American Medical Association in 2008 and codified in a modified form in the PPACA in 2010.

All of these six principles reflect components of the Jail Inreach Project that are hypothesized to have a role in contributing to its ability to reduce rearrest rates. Continuity of relationship with a **personal physician** is associated with consumer satisfaction (Saultz & Albedaiwi, 2004), consumer preference (Pandhi & Saultz, 2006), consumer trust (Gabel, Lucas, & Westbury, 1993; Mainous, Baker, Love, Gray, & Gill, 2001; Schers, van den Hoogen, Bor, Grol, & van den Bosch, 2005), and improved outcomes for both preventive health care and a reduction in hospitalizations (Saultz & Lochner, 2005). A personal physician is a core element of the Jail Inreach Project. The vast majority of program participants has no form of health insurance (more than 97% of those seen in HHH clinics in 2010) and thus lack a health home and relationship with a provider. For these individuals, the jail becomes a de facto mental health care provider and one of the only avenues to receiving essential and stabilizing care. The Jail Inreach Project links participants with primary care providers in the community. Although individuals do not always see the same physician, as there is a limited number of providers, the Jail Inreach Project makes an effort to maintain as much continuity with specific PCPs as possible.

The Jail Inreach Project takes steps to address needs from a **whole person** perspective through the use of a patient-centered approach. People who are marginalized and vulnerable tend to respond poorly to traditional models of care, which are typically provider-led encounters rather than patient centered. The use of the GNC model aims to empower patients as active participants in their treatment. When reachable goals are negotiated between the provider and the patient, the process provides the patient the opportunity to experience success by encouraging follow-through and personal investment (Rochon et al., 2006).

Because of complex needs, the **coordination** and provision of immediate services are essential for those who are homeless, mentally ill, and being released from jail. Having providers help identify and coordinate services both within and outside of the PCMH can aid in addressing core physical and behavioral health concerns as well as psychosocial needs. The Jail Inreach Project provides **integrated care** (physical and behavioral health treatment) including dental care and ancillary services, coordinating outside services as needed. HHH maintains established relationships with local organizations providing services to homeless individuals and collaborates with other nonprofit agencies, the hospital district, the local community mental health authority, the Harris County Jail, and the Harris County Sheriff's office, among others. The coordination process varies based on the needs of the client.

The structure of the Jail Inreach Program is based on the **evidence-based practice** of critical time intervention (CTI), which is specific to those who are homeless and diagnosed with mental illness. It "aims to enhance continuity of care during the transition from institutional to community living" (National Registry of Evidence-Based Programs and Practices, 2011). CTI has two key components. It dictates that relationship building begins while the individual is still incarcerated. It then strengthens long-term ties to services and support systems by addressing logistical and emotional needs during reentry. The structure of the Jail Inreach Project is based on the three main phases in CTI:

> (1) transition to the community, which focuses on providing intensive support and assessing the resources that exist for the transition of care to community providers; (2) tryout, which involves testing and adjusting the systems of support that were developed in the first phase; and (3) transfer of care, which completes the transfer of care to community resources that will provide long-term support. (National Registry of Evidence-Based Programs and Practices, 2011)

In addition, **health information technologies**, specifically the electronic record keeping and tracking systems, facilitate communication between multiple providers. They also serve as tools for monitoring and **continuous quality improvement**.

The Jail Inreach Project facilitates **access to care** through its close proximity to the Harris County Jail and the option of direct release to a case manager. Initial meetings are held when referred clients are still incarcerated, and the optional "release to a case manager" alternative improves linkage with services. These steps help to reduce the access barriers frequently experienced by vulnerable populations. Currently the project does not have expanded hours, offering scheduled daytime appointments during the week with consumers seeking emergency care if needs arise after hours. Walk-in appointments are available during limited hours at the Cathedral Clinic on weekends. During weekday hours of operation, consumers may also receive an appointment as a "walk-in," and telepsychiatry appointments are available within 90 minutes of contact.

Current reimbursement practices for health care fail to incentivize the goals of PCMHs, instead rewarding volume over quality. The promotion of PCMHs calls for "a new financing system that rewards continuity, patient-centered care and accountability" (Robert Graham Center, 2007, p. 17). The alternative approaches to health care (e.g., non-face-to-face services, coordination and consultation between providers, and the use of ancillary providers and services) utilized in PCMHs typically are not reimbursable (Robert Graham Center, 2007). The PPACA supports new payment approaches for PCMH settings (Section 3502). Improved policy for payment systems for PCMHs would reward efficiency of care and continuity of providers (Robert Graham Center, 2007). But currently the system lacks **payment that recognizes added value**.

It is within HHH's model of care to provide quality services to a population that often has overwhelming and complex needs. To mitigate the effects of incentivized volume over quality, HHH and the Jail Inreach Project have a diverse funding base, including private foundations, individuals, and public funding. Because of the nature of HHH and the Jail Inreach Project as a safety net to those who have typically "fallen through the cracks" and lack any form of health insurance, reimbursement is not a funding source for the program or the agency. As an FQHC, some funding is received from the Bureau of Primary Health Care. However, this funding is limited and supports direct patient care rather than other components of the Jail Inreach Project. Some additional funding comes from both Harris County and the local mental health authority, but it fails to cover the cost of even 50% of the program.

The Jail Inreach Project has reduced the rearrest rates of those who participate in the program, therefore reducing costs associated with their repeated incarceration. Cost savings in one system, however, do not automatically translate into additional funding in other service systems. Although the cost of providing care in the community is much less than that of providing health services within correctional settings, access to care on release is often compromised by a lack of available community services and an underfunded public health system that stretches agencies far beyond their capacities. This makes the coordination of care and integrated care models especially impactful.

LIMITATIONS AND CHALLENGES

The database used to manage and track outcomes of the Jail Inreach Project was developed from a spreadsheet initially used by case managers to track client notes. The database and spreadsheets went through several iterations early in the program implementation to adjust to necessary programmatic changes. The program evaluation, therefore, required some backtracking to fill in missing data.

The findings discussed in this article stem from program evaluation efforts assessing the Jail Inreach Project's success in meeting outlined goals and are therefore specific to only those being served by the program rather than as a comparative analysis. Although these findings are promising, suggesting positive treatment effects for this intervention, the lack of a control group leaves the findings open to alternative interpretation. Results may be the result of, for instance, effects such as "aging out" of criminal justice involvement, that is, they may simply reflect a natural attenuation of criminal involvement with the passing of time. Efforts to expand evaluation to include comparative analyses using propensity scoring to identify a "control group" are currently under way. Future program evaluations will attempt to constitute quasi-controls through the use of propensity score analysis.

A major systematic limitation of the program as a whole is the balance between individuals served via the Jail Inreach Project and the capacity of the community to provide services. There is a limited supply of affordable housing, limitations on the number of mental health care appointments in the county health care systems, and other restrictions on needed services; therefore the program can serve and expand only within the constraints of available community resources, which are scarce.

The Jail Inreach Project provides an example of a PCMH that specifically serves those who are homeless and mentally ill and are cycling among the streets, emergency centers, and jail cells. There continues to be a growing number and increasing visibility of people in need of long-term care because of mental illness and/or substance abuse. Those who cycle rapidly through the correctional system not only tend to have high rates of incarceration but also have high utilization rates of public hospitals and emergency centers. To further address the revolving door, HHH continues to explore the possibility of developing a similar program within a county public hospital to link homeless persons utilizing the emergency center as a primary source of care to appropriate and more effective venues of health services. The involvement of additional institutions invested in serving the population caught in the revolving door promotes systemic change. Changing policy on a systemic level ensures the sustainability of a system that better addresses the complex needs of this population. Hospital inreach would establish a multipronged approach in efforts to reduce the effects of and number of people who have fallen through the cracks of the health care system.

CONCLUSION

A rise in the U.S. jail population, overcrowding in jails, and high recidivism rates make it increasingly urgent to identify successful programs and supports for inmates leaving jail and returning to society. Individuals who are homeless and mentally ill are particularly vulnerable and highly affected by interruptions in treatment and a lack of immediate and

ongoing care following release from jail or the hospital. This makes the coordination of post-release health services especially impactful. Providing continuity and access to care that may not otherwise be available and aiding in the establishment of a PCMH help reduce the number of individuals repeatedly cycling among jail, the streets, and emergency departments. Many components of PCMHs are particularly well suited to serving jail releasees and diverting them from a cycle of reincarceration. Data from the Jail Inreach Project show it to be a pilot program worthy of study and replication in the search for models to divert individuals with mental illness from repeated engagement with the criminal justice system.

REFERENCES

Allison, D., Fontaine, K., Heo, M., Mentore, J., Cappelleri, J., Chanderl, L., . . . Cheskin, L. (1999). The distribution of body mass index among individuals with and without schizophrenia. *Journal of Clinical Psychiatry*, *60*, 215-220.

Anderson, R., Freedland, K., Clouse, R., & Lustman, P. (2001). The prevalence of co-morbid depression in adults with diabetes: *A meta-analysis. Diabetes Care, 24*(6), 1069-1078.

Beck, A. (2006, June 27). *The importance of successful reentry to jail population growth* [PowerPoint slides]. Presented to the Urban Institute Jail Reentry Roundtable, Washington, DC. Retrieved from www.urban.org/projects/reentry-roundtable/upload/beck.PPT

Binswanger, I., Krueger, P., & Steiner, J. (2009). Prevalence of chronic medical conditions among jail and prison inmates in the USA compared with the general population. *Journal of Epidemiology and Community Health*, *63*, 912-919.

Brown, C. (2011, January). Identifying characteristics of mentally ill homeless individuals who are successfully linked to health and social services post-incarceration via the Jail Inreach Project. *Texas Medical Center Dissertations*, AAI1483107. Retrieved from http://digitalcommons.library.tmc.edu/dissertations/AAI1483107

Brown, K. (2003, September). *Managing sexually transmitted diseases in jails* (HIV and Hepatitis Prisons population report). Retrieved from http://www.idcronline.org/%252E%252E/archives/sept03/mainarticle.html

Buck, D., Brown, C., & Hickey, J. (2011). The Jail Inreach Project: Linking homeless inmates who have mental illness with community health services. *Psychiatric Services*, *62*, 120-122.

Chaikind, H., Copeland, C., Redhead, C., & Staman, J. (2011). *PPACA: A brief overview of the law*, *implementation*, *and legal challenges* (Congressional Research Service Report for Congress). Retrieved from http://www.nationalaglawcenter.org/assets/crs/R41664.pdf

Cuddeback, G., Scheyett, A., Pettus-Davis, C., & Morrissey, J. (2010). General medical problems of incarcerated persons with severe and persistent mental illness: A population based study. *Psychiatric Services*, *61*, 45-49.

Cunniff, M. (2002, January). *Jail crowding: Understanding jail population dynamics*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. Retrieved from http://nicic.gov/Library/Files/017209.pdf

Dickens, C., McGowan, L., Clark-Carter, D., & Creed, F. (2002). Depression in rheumatoid arthritis: A systematic review of the literature with meta-analysis. *Psychosomatic Medicine*, *64*, 52-60.

Draine, J., Wilson, A., Metraux, S., Hadley, T., & Evans, A. (2010). The impact of mental illness status on the length of jail detention and the legal mechanism of jail release. *Psychiatric Services*, *61*, 458-462. Retrieved from http://www.tucollaborative.org/pdfs/Peer_Reviewed_Publications/The_Impact_of_Mental_Illness_Status_on_the_Length_of_Jail_Detention_and_the_Legal_Mechanism_of_Jail_Release.pdf

Frasure-Smith, N., Lesperance, F., & Talajic, M. (1993). Depression following myocardial infarction. Impact on 6-month survival. *Journal of American Medical Association, 270*(15), 1819-1825.

Gabel, L., Lucas, J., & Westbury, R. (1993). Why do patients continue to see the same physician? *Family Practice Research Journal*, *13*, 133-147.

Grumbach, K., & Grundy, P. (2010). *Outcomes of implementing patient centered medical home interventions: A review of the evidence from prospective evaluation studies in the United States*. Retrieved from http://www.pcpcc.net/files/evidence_outcomes_in_pcmh.pdf

Haimowitz, S. (2004). Slowing the revolving door: Community reentry of offenders with mental illness. *Law and Psychiatry*, *55*, 373-375. Retrieved from http://www.caction.org/rrt_new/professionals/articles/HAIMOWITZ-OFFENDERS%20WITH%20MENTAL%20ILLNESS.pdf

Harris County Sheriff's Office. (n.d.). *Mental Health Unit. Houston, Tex, Harris County Sheriff's Office*. Retrieved from http://webservices.hcso.hctx.net/detention/MHU.asp

Hennessey, K., Kim, A., Griffin, V., Collins, N., Weinbaum, C., & Sabin, K. (2008). Prevalence of infection with hepatitis B and C viruses and co-infection with HIV in three jails: A case for viral hepatitis prevention in jails in the United States. *Journal of Urban Health*, *86*, 93-105.

Herra, A., de Santiago, A., Sandoya, M., Fernandez, M., Diez-Manrique, J., & Vazquez-Barquero, J. (2000). Determinants of smoking behavior in outpatients with schizophrenia. *Schizophrenia Research*, *21*, 373-381.

Honberg, R., & Gruttadaro, D. (2005). Flawed mental health policies and the tragedy of criminalization. *Corrections Today*, *67*, 22-24.

James, D., & Glaze, L. (2006). *Mental health problems of prison and jail inmates.* Washington, DC: U.S. Department of Justice. Retrieved from http://bjs.ojp.usdoj.gov/content/pub/pdf/mhppji.pdf

Junginger, J., Claypoole, K., Laygo, R., & Crisanti, A. (2006). Effects of serious mental illness and substance abuse on criminal offense. *Psychiatric Services*, *57*, 879-882.

Katon, W., & Sullivan, M. (1990). Depression and chronic medical illness. *Journal of Clinical Psychiatry 51*(Suppl.), 3-11.

Kessler, R., Berglund, P., Zhao, S., Leaf, P., Kouzis, A., Bruce, M., . . . Schneier, M. (1996). The 12-month prevalence and correlates of serious mental illness (SMI). In R. Manderscheid & M. Sonnenschein (Eds.), *Mental health*, *United States*, *1996* (pp. 59-70). Washington, DC: Government Printing Office.

Kessler, R., Ormel, H., Demler, O., & Stang, P. (2003). Comorbid mental disorders account for the role impairment of commonly-occurring chronic physical disorders: Results from the National Comorbidity Survey. *Journal of Occupational and Environmental Science*, *45*, 1257-1266.

Lamb, H., Weinberger, L., & Gross, B. (2004). Mentally ill persons in the criminal justice system: Some perspectives. *Psychiatric Quarterly*, *75*, 107-126.

Lurigio, A., Rollins, A., & Rollins, J. (2004). The effects of serious mental illness on offender reentry. *Federal Probation*, *68*, 45-52. Retrieved from http://www.caction.org/rrt_new/professionals/articles/LURIGIO-MENTAL%20ILLNESS%20AND%20REENTRY.pdf

Mainous, A., Baker, R., Love, M., Gray, D., & Gill, J. (2001). Continuity of care and trust in one's physician: Evidence from primary care in the United States and the United Kingdom. *Family Medicine*, *33*, 22-27.

Martin, M., & Katsampes, P. (2007). *Sheriff's guide to effective jail operations.* Washington, DC: U.S. Department of Justice, National Institute of Corrections. Retrieved from http://nicic.gov/library/files/021925.pdf

Minton, T. (2011). *Jail inmates at midyear 2010—Statistical tables*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from http://bjs.ojp.usdoj.gov/content/pub/pdf/jim10st.pdf

National Commission on Correctional Health Care. (2002). *The health status of soon-to-be-released inmates: A report to Congress* (Vol. 1). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from http://bjs.ojp.usdoj.gov/content/pub/pdf/mhtip.pdf

National Registry of Evidence-Based Programs and Practices (2011). *Critical time intervention.* Retrieved from http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=125

Osher, F. (2007, January–February). Short-term strategies to improve reentry of jail population: Expanding and implementing the APIC model. *American Jails*, pp. 9-18. Retrieved from http://www.ojp.usdoj.gov/BJA/pdf/APIC_Model.pdf

Osher, F., Steadman, H., & Barr, H. (2002). *A best practice approach to community reentry from jails for inmates with co-occurring disorders: The APIC model*. National GAINS Center. Retrieved from http://www.gainscenter.samhsa.gov/pdfs/reentry/apic.pdf

Pandhi, N., & Saultz, J. (2006). Patients' perceptions of interpersonal continuity of care. *Journal of the American Board of Family Medicine*, *19*, 390-397.

Parks, J., Svendsen, D., Singer, P., Foti, M., & Mauer, B. (2006). *Morbidity and mortality in people with serious mental illness*. National Association of State Mental Health Program Directors. Retrieved from http://www.nasmhpd.org/general_files/publications/med_directors_pubs/Technical%20Report%20on%20Morbidity%20and%20Mortaility%20-%20Final%2011-06.pdf

Patient-centered primary care collaborative (2007). Joint principles of the patient centered medical home. Retrieved from http://www.pcpcc.net/content/joint-principles-patient-centered-medical-home

Patient Protection and Affordable Care Act, Pub. L. No. 111-152 (2010). Retrieved from http://docs.house.gov/energycommerce/ppacacon.pdf

Peterson, J., Skeem, J., Hart, E., Vidal, S., & Keith, F. (2010). Analyzing offense patterns as a function of mental illness to test the criminalization hypothesis. *Psychiatric Services*, *61*, 1217-1222.

Robert Graham Center. (2007, November). *The patient centered medical home: History, seven core features, evidence, and transformational change*. Retrieved from http://www.graham-center.org/PreBuilt/PCMH.pdf

Rochon, D., Buck, D., Mahata, K., & Turley, J. (2006). The evolution of goal-negotiated care. In J. Westbrook & J. Callen (Eds.), *HIC 2006: Bridging the digital divide: Clinician*, *consumer and computer* (pp. 1-7). Sydney, Australia: Health Informatics Society of Australia.

Rural Assistance Center. (2010). *Federally qualified health centers frequently asked question*s. Retrieved from http://www.raconline.org/info_guides/clinics/fqhcfaq.php#location

Safety Net Medical Home Initiative. (2010, October). *Health reform and the patient-centered medical home: Policy provisions and expectations of the Patient Protection and Affordable Care Act*. Seattle, WA: Qualis Health and Bailit Health Purchasing. Retrieved from http://www.scribd.com/doc/41234791/Safety-Net-Medical-Home-Initiative-Policy-Brief-PPACA-and-Patient-Centered-Medical-Home

Saultz, J., & Albedaiwi, W. (2004). Interpersonal continuity of care and patient satisfaction: A critical review. *Annals of Family Medicine*, *2*, 445-451.

Saultz, J., & Lochner, J. (2005). Interpersonal continuity of care and care outcomes: A critical review. *Annals of Family Medicine*, *3*, 159-166.

Schers, H., van den Hoogen, H., Bor, H., Grol, R., & van den Bosch, W. (2005). Familiarity with a GP and patients' evaluations of care. A cross-sectional study. *Family Practice*, *22*, 15-19.

Solomon, A., Osborne, J., LoBuglio, S., Mellow, J., & Mukamal, D. (2008, May). *Life after lockup: Improving reentry from jail to the community*. Retrieved from http://www.ncjrs.gov/pdffiles1/bja/220095.pdf

Steadman, H., Osher, F., Robbins, P., Case, B., & Samuels, S. (2009). Prevalence of serious mental illness among jail inmates. *Psychiatric Services*, *60*, 761-765. Retrieved from http://consensusproject.org/publications/prevalence-of-serious-mental-illness-among-jail-inmates/PsySJailMHStudy.pdf

Steadman, H., & Veysey, B. (1997). Providing services for jail inmates with mental disorders. *National Institute of Justice Research in Brief*. Retrieved from http://www.ncjrs.gov/pdffiles/162207.pdf

Stephan, J. (2001). *Census of jails*, *1999* (NCJ 186633). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics. Retrieved from http://bjs.ojp.usdoj.gov/content/pub/pdf/cj99.pdf

Substance Abuse and Mental Health Services Administration. (2004). *Results from the 2003 National Survey on Drug Use and Health: National findings* (Office of Applied Studies, NSDUH Series H-25, DHHS Pub. No. SMA 04-3964). Rockville, MD: Author. Retrieved from http://oas.samhsa.gov/nhsda/2k3nsduh/2k3ResultsW.pdf

Swartz, J., Alaimo, C., Sr., & Kiriazes, J. (2011). Chronic medical conditions among jail detainees in residential psychiatric treatment. *Criminal Justice and Behavior*, *38*, 354-374.

Torrey, E. (1999, August). Reinventing mental health care. *City Journal*. Retrieved from http://www.city-journal.org/html/9_4_a5.html

Wang, P., Demler, O., Olfson, M., Pincus, H., Wells, K., & Kessler, R. (2006). Changing profiles of services sectors used for mental health care in the United States. *American Journal of Psychiatry*, *163*, 1187-1198.

Watt, T. (2009, Fall). *A process and outcome evaluation of two integrated behavioral health care models: People's Community Clinic and Lone Star Circle of Care* (Final report). Retrieved from http://www.austinpcc.org/documents/specialprograms/IBH_year_3_report.pdf

Weinbaum, C., Sabin, K., & Santibanez, S. (2005). Hepatitis B, hepatitis C, and HIV in correctional populations: A review of epidemiology and prevention. *AIDS*, *19*(Suppl. 3), S42-S46.

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