Evaluating Medicaid Access for Halfway House Residents: A Research Partnership with the Connecticut Department of Correction

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Abstract

The goals of this study were to examine how providing Medicaid coverage for halfway house residents may affect care seeking, improve health care usage, and decrease criminal recidivism relative to providing health care through prison or jail medical facilities. To achieve these goals, we developed a researcher-practitioner partnership with the Connecticut Department of Correction (DOC) to implement a mixed-methods research design. Qualitative data collection included focus groups with halfway house residents; interviews with halfway house staff, correctional health providers, correctional officers, and state-level DOC officials; and site observations of DOC medical facilities. Quantitative data collection included collection of administrative and recidivism data from DOC, coding of study participants' DOC medical charts to measure their baseline health status and health care usage in prison or jail, and collection of Medicaid enrollment and claims data from Connecticut's Department of Social Services (DSS) to measure Medicaid enrollment and health care usage in the community. The study design compared outcomes based on two separate comparisons. The first comparison was halfway house residents who were eligible to be enrolled in Medicaid under a pilot program implemented in April-May 2014 (n=147) compared to similarly situated halfway house residents one year prior to or one year after the pilot (n=233). The second comparison was halfway house residents in April-May 2015 who were eligible for Medicaid enrollment due to their legal custody status (n=287) compared to a contemporaneous group of halfway house residents who were not eligible for Medicaid because they had a different legal custody status (n=892).

Findings from the qualitative study suggested that, despite a few challenges, residents were more likely to seek care when they could access community-based providers. They also perceived that the treatment they received was of higher quality and gave them more choice than the services in prison and jail medical units. Findings from the quantitative study were largely consistent with the qualitative findings and suggested that residents who had access to community-based providers were more likely to receive care during their halfway house stay than residents who were required to return to prison. However, findings also showed that residents with access to community-based care were more likely to be reincarcerated for a new crime within one year of entering the halfway house. Study limitations include difficulties in ensuring consistency and level of detail across data sources, that we were only able to examine one source of community health insurance, and that our results do not extend to describing Medicaid enrollment and health care utilization after residents have transitioned from the halfway house to the community at large.

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Introduction

In 2014, the National Institute of Justice (NIJ) funded the Urban Institute (Urban) to examine how providing Medicaid coverage for halfway house residents may affect care seeking, improve health care usage, and decrease criminal recidivism relative to providing health care through prison or jail medical facilities. To achieve the goals of this study, we developed a researcher-practitioner partnership with the Connecticut Department of Correction (DOC) to implement a mixed-methods research design. The study focuses on the distinction between two legal custody statuses of people living in halfway houses. "Community release" residents, who are considered to be under DOC custody (i.e., still technically "incarcerated") and therefore ineligible for Medicaid, were required to go back to medical units in prison or jail for care. "Parolee" residents, who were on parole or some other supervised release status, were eligible for Medicaid and could therefore seek care in the community.

The qualitative component of the study aimed to provide context around the barriers and facilitators to accessing health care in prison or jail and Medicaid community-based care, as well as resident and staff perceptions of the change from prison-based to community-based care. The quantitative component aimed to measure the prevalence of health problems such as chronic medical, mental health, and substance abuse issues among halfway house residents; enrollment in Medicaid; health care usage via both prison and Medicaid; and the effect of Medicaid access on recidivism.

Qualitative data collection included focus groups with halfway house residents; interviews with halfway house staff, correctional health providers, correctional officers, and state-level DOC officials; and site observations of DOC medical facilities. Quantitative data collection included collection of administrative and recidivism data from DOC, coding of study participants' DOC medical charts to measure their baseline health status and health care usage in prison or jail, and collection of Medicaid enrollment and claims data from Connecticut's Department of Social Services (DSS) to measure Medicaid enrollment and health care usage in the community.

Our main research questions were:

1. How did halfway house residents who were still classified as "incarcerated" access care in DOC facilities?
2. What were the perceptions of residents and staff about the change from prison- to community-based care?
3. What factors helped and hindered halfway house residents in receiving a) prison- and b) community-based care?
4. How did the transition to Medicaid affect halfway house and correctional facility operations?
5. To what extent were people eligible for Medicaid enrolled upon entry to the halfway house?
6. How much and what types of health care do halfway house residents receive through a) prison- and b) community-based care?
7. How does access to Medicaid affect health care utilization among halfway house residents?

8. How does access to Medicaid affect recidivism among halfway house residents?

In this report, we present a summary of the findings for our research questions. Detailed findings for research questions 1-4 are available in "Expanding Medicaid Access to Halfway House Residents: Early Qualitative Findings from Connecticut's Experience" (Mallik-Kane, Paddock, and Shukla, 2018). Findings comparing diagnoses made during incarceration with diagnoses and services received in the community will be published in a forthcoming journal article. Additionally, we plan to report on lessons learned from comparing health care utilization in prison with that in the community in a practitioner-focused article.

Background and Summary of the Literature

Incarcerated persons suffer from chronic, infectious, and mental illnesses at higher rates than the general population (American Association of Family Physicians, 2017; National Commission on Correctional Health Care, 2002). While incarcerated individuals often receive health care in prison (Visher, Lattimore, Barrick, & Tueller, 2016), health and health care utilization can drop significantly after release, as found in the Urban Institute's *Returning Home* study (Mallik-Kane & Visher, 2008). Over 80 percent of released individuals had a physical, mental, or substance-related condition, and 40 percent of men and 60 percent of women had multiple conditions. In the year after release, 68 percent of men and 58 percent of women had no health coverage; receipt of care dropped by roughly 50 percent within two months of release; self-assessments of good health declined over time; and one-third of those released with health conditions utilized emergency room care. Chronic physical and mental illness and substance abuse were also associated with poor housing and employment outcomes, familial problems (Calcaterra, Beaty, Mueller, Min & Binswanger, 2014), and more criminal activity, rearrest, and reincarceration.

Medicaid Coverage for Returning Prisoners

Medicaid is a joint state-federal health insurance program for low-income adults; states are responsible for a share of program costs and receive federal matching funds. Under the Patient Protection and Affordable Care Act (ACA), states can opt to cover nearly all adults with incomes below 138 percent of the federal poverty level. However, Medicaid coverage is typically disrupted by incarceration. Benefits are either terminated or suspended upon admission because states cannot receive the federal match for services provided during incarceration. At the time this study was conducted, federal policy allowed for benefits re-instatement upon release, but whether an individual was "released" depended on his or her legal custody status rather than physical location.

Reentry programs focused on transitional planning and aftercare programs, including enrollment in Medicaid, have shown easier access to medical and mental health services after release, increases in healthcare utilization, and reductions in recidivism (Morrissey, Cuddeback, Cuellar & Steadman, 2007; Morrissey, Domino & Cuddeback, 2016; Morrissey et al., 2006; National Conference of State Legislatures, 2009). Timely access to medical care post-release has been found to improve health conditions among previously incarcerated persons and reduce the number of acute care visits (Fox et al., 2014; Shavit et al., 2017; Wang et al., 2012).

The Role of Halfway Houses in Reentry: Nationwide and in Connecticut

Halfway houses are meant to provide a transition period between prison and the community, during which previously incarcerated persons are able to look for work and permanent housing, participate in treatment, and visit their families while remaining in stable housing and under supervision (Knapp & Burke, 1992; Latessa & Smith, 2015; Travis, 2005). A number of studies have demonstrated the effectiveness of halfway houses in reducing recidivism (Hamilton & Campbell, 2014; Lutze, Rosky & Hamilton, 2014; Seiter, 1975, cited in Seiter & Kadela, 2003) however, this support is not undisputed. Research suggests that the effectiveness of halfway houses depends largely on their residents' risk and needs levels as well as the quality of the treatment and rehabilitative programs available to residents (LaVigne, 2010; Lowenkamp & Latessa, 2005; Seiter & Kadela, 2003; Wright, Pratt, Lowenkamp & Latessa, 2013).

There are several possible ways for people to enter a halfway house, a common one being release from prison onto some form of community supervision (Knapp & Burke, 1992). Halfway houses in Connecticut house people released from incarceration for an average of four to six months, providing transitional services such as work-release jobs, residential substance abuse treatment, and supportive housing as a bridge to full release in the community. Roughly 85 percent of residents are "community release" who were administratively released by the DOC once they were within 18 months of their release dates. The remaining 15 percent are "parolees"—individuals with sentences of two or more years released by the Board of Pardon and Paroles after serving 50 to 85 percent of their sentences. Both groups reside together in the halfway houses and are supervised by a consolidated DOC Division of Parole and Community Services.

Connecticut's State-financed Medicaid Program for Halfway House Residents

Connecticut's halfway house residents who remain under the legal custody of the DOC, so-called "community release," are considered to be incarcerated. As a result, they were restricted from traditional Medicaid coverage, which cannot use federal dollars to pay for services to incarcerated persons. Halfway house residents on community release had to access health care through DOC health services, which required being transported back to a prison or jail clinic for any non-emergency care, ranging from routine health maintenance visits to urgent and acute health problems. However, other halfway house residents under the legal custody of the state's parole board were not considered incarcerated; "parolees" therefore participated in the Medicaid program and received community-based health care instead.

In 2014, the Connecticut state legislature approved a new state-financed Medicaid initiative to extend coverage and benefits to community release halfway house residents. A pilot program was conducted by enrolling community release halfway house residents in Medicaid during several weeks in April and May 2014. However, funding for the program was not included in the state's budget and the program was not fully implemented. Instead, in September 2016, Connecticut revised their Medicaid eligibility rules to allow community release residents to enroll following a change in the federal Center for Medicaid and Medicare Services (CMS) guidance. The new CMS guidance allowed Medicaid eligibility for any halfway house residents as long as they had "freedom of movement and association."[1] This change in the federal standard

[1] More information can be found at https://www.medicaid.gov/federal-policy-guidance/downloads/sho16007.pdf.

for eligibility from legal custody status to freedom of movement may prompt other states to allow their own halfway house residents to enroll in Medicaid.

Yet, the transition from prison-based to community-based health services is far from guaranteed to increase health care utilization. Access to Medicaid may increase health care utilization because residents will have a range of community-based services available to them, instead of needing to return to correctional facilities for care. However, the emphasis on personal choice and responsibility under the new program leaves open the possibility that residents might decline or fail to access care.

Methods and Data

Qualitative Data Collection

The qualitative study addressed research questions 1-4, focusing on how residents and staff experienced and perceived the transition to Medicaid in access to care, health care usage, and program operations. Specifically, we examined 1) how residents who were classified as "incarcerated" accessed care in DOC facilities, 2) how residents and staff perceived and experienced the change from prison- to community-based care, 3) what factors helped and hindered access to care in both prison- and community-based settings, and 4) how the transition to Medicaid affected halfway house and correctional facility operations.

Design and Sample

In designing the qualitative data collection, we aimed to conduct focus groups and staff interviews in one halfway house in each parole district in order to get perspectives from across the state. We collaborated with DOC staff to identify halfway houses with large enough populations to yield focus groups with up to 8-10 participants. Once the halfway houses were identified, we worked with the halfway house staff to distribute flyers announcing the date and time of the focus groups at the weekly house meeting and to post the flyers in common areas. We conducted the focus groups in each house with the residents who were available and who chose to participate. We also requested to interview at least one staff member in each house; typically, we spoke to either a case manager or a supervisor. Focus groups and interviews were audio recorded unless any participant did not agree to it. We did not provide any incentives for participation in either the focus groups or interviews.

We conducted the following complementary data collection activities in each halfway house:

- Focus groups with residents, including separate focus groups for "community release" residents who historically returned to prison or jail for care and "parolees" with long-standing access to Medicaid in the community (see Appendix B for the focus group protocol),
- Interviews with halfway house program staff, and
- Facility observation and staff interviews at the designated jail or prison where the house's residents historically returned for care.

Additionally, we interviewed state agency administrators within DOC and DSS about halfway house policies, Medicaid enrollment procedures, and systemic health care access issues. Table 1 details our

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qualitative data collection activities. All data collection activities were approved by the Urban Institute's institutional review board and the DOC's research advisory committee.

TABLE 1

Qualitative Data Collection Activities

Data source	Dates collected	Number and description
Focus groups with halfway house residents	October 2016	▪ 6 halfway houses: 5 men's (one per district) and 1 women's ▪ Goal of two groups per house: 1. Residents who previously returned to DOC medical units because of legal status as "community release" 2. Residents with longstanding Medicaid access because of legal status as "parolees" ▪ 11 groups conducted. Average group size: 5 (range 2 to 11) ▪ 58 residents participated in total ○ 79% men and 11% women ○ 37% white, 43% black, 18% Hispanic, and 2% other race ○ 52% "community release" and 48% "parolees"
Interviews with halfway house program staff	March–May 2017	▪ 10 semi structured staff interviews: 5 case managers and 5 administrators ▪ At least one staff member per halfway house ▪ In person or via telephone
DOC facility observation and staff interviews	May 2017	▪ 5 facility visits: 3 jails and 2 prisons ▪ These were all the correctional facilities used for halfway house residents' health care ▪ Staff-guided tour of admission, search, and processing areas; waiting areas; and medical units ▪ Semi structured interviews with custody staff (e.g., deputy wardens, correctional officers) and medical staff (e.g., doctors, nurses, administrators)
Interviews with state agency administrators	March–May 2017	▪ DOC health and addiction services ▪ DOC Division of Parole and Community Services ▪ Department of Social Services

Analysis

The qualitative data collected through all these activities were analyzed and synthesized. Focus groups with residents were transcribed verbatim and coded using qualitative analysis software (NVivo). This allowed us to document the frequency of health care access issues and distinguish between prison- and community-based care experiences. Staff interviews and facility observation notes were summarized manually. Staff perspectives were compared with the resident focus group findings. This report focuses on findings reported by a majority of parole districts. However, where informative, we note findings from individual respondents and districts.

Quantitative Data Collection

The quantitative study was designed to address research questions 5-8 and accordingly focused on three outcomes: Medicaid enrollment, health care utilization, and recidivism. We wanted to examine 1) how much health care people received in prison; 2) the extent to which people who were eligible for Medicaid were enrolled upon entry to the halfway house; 3) how much health care people received while living in the

halfway house, either from Medicaid providers or from DOC providers; and 4) the effect of Medicaid access on recidivism.

Design and Sample

The quantitative study was divided into two sub-studies (see Figure 1), with a combined study population of 1,436 halfway house residents.[2]

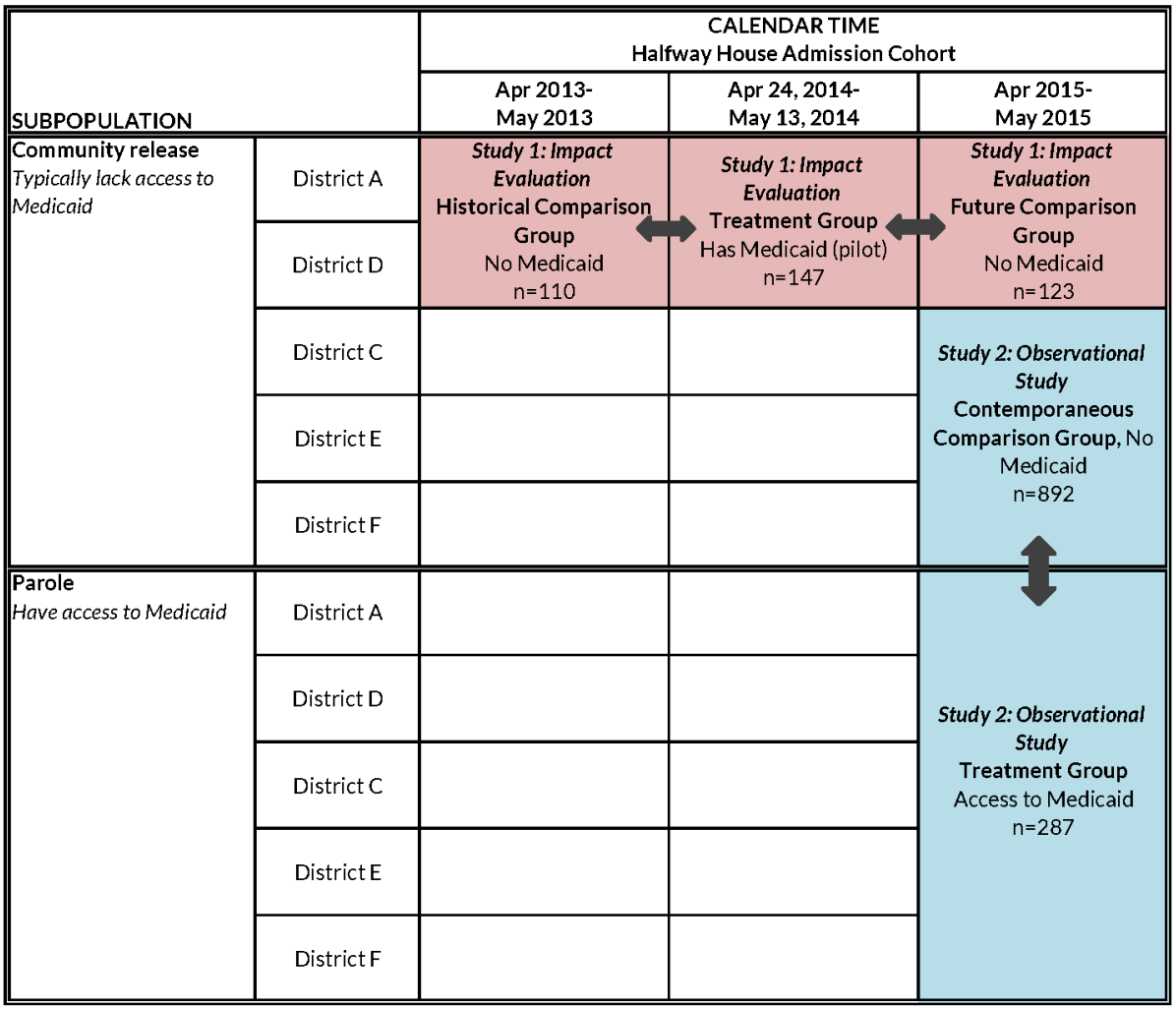
- **Study 1** (n=380) was structured as an impact evaluation. The treatment group (n=147) consists of halfway house residents who were eligible to be enrolled in Medicaid under the 2014 pilot program. This pilot was conducted in two of Connecticut's five parole districts—one rural and one urban—during several weeks in April and May 2014. Residents enrolled through the pilot program were granted Medicaid coverage for a 12-month period, after which they would have to recertify their eligibility, just like any other Medicaid beneficiary. Consistent with an intent-to-treat design, treatment group status was assigned based on the opportunity for enrollment in Medicaid rather than actual enrollment. The comparison group (n=233) consisted of similarly situated community release halfway house residents who were living in halfway houses in the pilot parole districts during the same time of year one year prior to or one year after the pilot (i.e., 2013 and 2015).
- **Study 2** (n=1,179) was structured as an observational study. In this study, the treatment group (n=287) consists of halfway house residents throughout the state in April-May 2015 who were released under a status other than community release (e.g., parole). These residents were automatically eligible for Medicaid upon release due to their status and are typically enrolled in Medicaid as part of the discharge planning process. The comparison group (n=892) consists of a contemporaneous group of halfway house residents released under a community release status and therefore not eligible for Medicaid. Individuals eligible for community release typically have a sentence of less than two years and are within 18 months of their release date, whereas those eligible for parole typically have at least a two-year sentence.

[2] Although there were 1,436 total residents included in the study, 123 residents (the 2015 community release residents from the two parole districts that were part of Study 1) appear in the comparison groups of both studies, resulting in a combined study sample size of 1,559.

FIGURE 1

Study Design

Impact Evaluation (shown in pink) and Observational Study (shown in blue)



Data Sources

Data for the quantitative study came from three sources: 1) DOC administrative data, 2) DSS Medicaid enrollment and claims, and 3) DOC medical charts. We received DOC administrative data on everyone who was a halfway house resident at some point during 2013-2015, and we used that data to identify the study groups. The DOC data also provided demographic, criminal history, and recidivism information for individuals in the study. After we identified the study participants, we requested and received Medicaid data from DSS on those participants, which provided information about Medicaid enrollment and utilization after individuals entered the halfway house.

While the DOC administrative data and the Medicaid data already existed in electronic format, the DOC medical charts were kept as paper records. As part of the study, current and former DOC Health Services

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staff coded information from the charts into a database developed by the project team. The study database collected baseline medical history information, as well as information about services received from DOC providers in the six months prior to entering the halfway house and during their halfway house stay (if applicable). Due to project delays, medical charts were coded for 681 (47%) of the 1,436 study participants. Table 2 below shows the number and percentage of charts coded by study group. In Study 1, 59% of treatment group charts were coded, compared with 48% of comparison group charts, a statistically significant difference (p-value = 0.03). In Study 2, 44% of treatment group charts were coded, compared with 46% of comparison group charts (p-value = 0.61). Although a significantly higher proportion of the charts was coded for the Study 1 treatment group compared to the comparison group, we do not believe this introduces substantial bias into our results, as the only significantly different characteristics between the treatment and comparison participants whose charts were coded were the same as the significantly different characteristics for the full treatment and comparison groups (i.e., most serious offense and parole district) (see Appendix Table C1).

TABLE 2

Charts Coded, by Study Group

		Charts coded	
Study group	**Total N**	**N**	**%**
Study 1	380	198	52.1
Treatment	147	87	59.2
Comparison	233	111	47.6
Study 2	1,179	537	45.6
Treatment	287	127	44.3
Comparison	892	410	46.0

Analysis

We examined Medicaid enrollment and health care utilization for both Study 1 and Study 2. However, we examined the effect of Medicaid access on recidivism for Study 1 only (the impact evaluation), because it compares community release residents with access to Medicaid to other similarly-situated community release residents without Medicaid access. In contrast, Study 2 (the observational study) compares parole residents to community release residents, a comparison that is more likely to be limited by systematic, unobservable differences between the different populations from which the two groups are drawn. We answered research question #5, about the extent to which people enrolled in Medicaid, by conducting descriptive analyses measuring any enrollment during a halfway house stay up to one year, the timing of the enrollment, and the proportion of the stay covered by Medicaid. We answered research question #6, about the extent of people's health care utilization based on their means of accessing health care, by conducting descriptive analyses measuring the receipt of different types of services (e.g., outpatient visits, hospitalizations, medications) both six months before and up to one year after entering the halfway house. We conducted multivariate logistic regression to answer research question #7, about the effect of Medicaid access on health care utilization. Due to challenges in comparing the medical chart data with the Medicaid

data, we were limited to a certain level of detail in our outcome measures. Our primary outcomes were any outpatient care, any inpatient care, and any medications received, with the primary independent variable being eligibility for Medicaid enrollment. We also controlled for health care utilization while incarcerated, health needs, and demographic information.

We answered research question #8, about the effect of access to Medicaid on recidivism, using multivariate logistic regression. The outcomes were 1) any reincarceration within one year of halfway house entry, 2) any post-sentence reincarceration for a new crime, and 3) any reincarceration for technical violations of supervision. The primary independent variable of interest was eligibility for Medicaid enrollment. While we controlled for a number of demographic and criminal history characteristics,[3] we did not account for actual Medicaid enrollment or health care utilization in the results shown. We tested Medicaid enrollment as a treatment variable and found substantively similar results to those using eligibility for Medicaid as the treatment. We also attempted to control for health care utilization in the halfway house. However, because we did not have medical chart data available for the entire treatment group, these models used a smaller sample size and produced unstable results.

Summary of Findings

Below we summarize the answers to the research questions included in this technical summary. The first four questions are answered using qualitative data and questions #5-8 are answered using the quantitative data.

Qualitative Findings

A more detailed version of these findings is reported in "Expanding Medicaid Access to Halfway House Residents: Early Qualitative Findings from Connecticut's Experience" (Mallik-Kane, Paddock & Shukla, 2018).

Care at DOC

Because of their legal custody status as "community release" residents, most halfway house residents were ineligible for Medicaid benefits prior to the Medicaid policy change in 2016. These individuals had to go back to prison and jail medical units for any non-emergency health services, including chronic disease management, prescription adjustments, mental health visits, dental and vision care, pain, and other acute but non-emergency concerns.

[3] Specifically, the analysis controlled for gender; race/ethnicity; education; any emergency contact (as a proxy for community ties); age at halfway house entry; age at first incarceration; number of prior incarcerations; length of incarceration; most serious current offense; DOC classification scores reflecting medical, mental health, and substance abuse needs; parole district, and the proportion of follow-up time spent in the halfway house (as opposed to out in the community).

Views about care in DOC

Halfway house residents had profoundly negative opinions of the quality of DOC-provided health care based on their past incarcerations, which made them reluctant to return. There were four common concerns raised by residents across the state.

- **Medication problems.** Residents reported dissatisfaction with medications prescribed by correctional health providers, perceiving that they were either over- or under-medicated. They perceived that the medications they used prior to incarceration were not available in prison and jail medical units, and the alternatives were not adequate.
- **Lack of individualized responses to health problems.** Residents often thought care at DOC relied on cheap, generic solutions over more individualized care. For instance, their perception of DOC dentists' solution to most problems was to extract the affected tooth instead of attempting more long-term treatment.
- **Long wait times to get medical attention.** Residents commonly perceived that facilities avoided providing medical services unless there was an emergency. They recalled that overt problems like bleeding received immediate attention, but "less visible" issues like pain did not receive needed immediate care.
- **Mistrustful and indifferent staff.** Residents felt that staff skepticism about their problems lengthened their wait time to see a clinician and individuals deferred seeking treatment to avoid dealing with this skepticism.

Fear of returning to a correctional facility for care

The experience of returning to a place of incarceration incited fears of being reincarcerated among residents. Halfway house staff stated that residents were hesitant to let them know about medical issues in order to avoid a visit to the DOC medical unit. Residents were particularly fearful of a so-called "medical remand," whereby DOC clinicians could recommend reincarcerating someone for medical observation or treatment if his or her health could not be managed safely within the halfway house. Though medical remands occurred rarely, some residents delayed seeking health care from DOC to avoid this risk.

Burdensome logistics and operational challenges

Despite the small number of halfway house residents who sought care from DOC medical units, both halfway house and DOC staff found getting residents into correctional facilities difficult and time-intensive.

- **Appointments required coordination between halfway house and DOC.** Residents were not allowed to contact DOC directly to schedule appointments. Instead, halfway house staff scheduled appointments for them. Staff explained that while appointments would sometimes be easy to schedule, finalizing appointments often took a few hours or even days.
- **Resource-intensive transportation to DOC.** Residents could walk or use public transportation to return to the DOC facility. However, lengthy travel times, in addition to the appointment itself, resulted in residents spending half a day or more to get health care, which was especially

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burdensome for working residents. When staff accompanied residents, they stayed with them for the duration of the appointment, which significantly increased the workload of other employees who remained in the house.

- **Burdensome security protocol.** Halfway house residents typically followed the same security process as new admissions, including using the same back entrance and undergoing a pat-down search. In some facilities, residents were strip-searched and waited for their appointments in large holding cells. Some facilities locked down hallways as residents were escorted to the medical wing to separate incarcerated individuals from halfway house residents.

Care in the Community

All residents were generally able to access care in the community after the Medicaid policy change in 2016. Residents reported that health insurance facilitated community-based care.

Perceived benefits of care in the community

Residents and staff reported various benefits of seeking care in the community over DOC. A few common advantages are discussed below:

- **Easy Medicaid enrollment.** Medicaid enrollment usually occurred during intake, though some residents arrived with coverage already established through DOC discharge planning efforts. Most people reported having coverage within a couple weeks of entering the halfway house. DOC and DSS, the state Medicaid agency, implemented a voucher system that allowed people to fill prescriptions in the interim.
- **Easy to schedule appointments.** Case managers in halfway houses often helped residents locate local community providers. Residents generally perceived making an appointment to be easy once they found a provider and appreciated their ability to use a walk-in clinic or schedule appointments on short notice when needed.
- **Freedom to choose a provider.** Residents in most districts appreciated being able to choose their own providers and to change if needed, contrasting this freedom with DOC.
- **Individualized attention and treatment.** Almost all residents agreed that medical staff in the community paid attention to what residents had to say and provided specific treatments and solutions to the residents' problems, as opposed to what they perceived as DOC medical staff's generic treatment. They were also perceived to be more responsive to the residents' concerns.
- **Professionalism and knowledge.** Doctors and nurses were perceived as being more professional and knowledgeable by residents, as compared to medical staff in the facilities. Residents also reported feeling listened to and cared for.

Perceived challenges of care in the community

Despite the benefits, seeking care in the community also had some limitations.

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- **Long wait times for specialized services.** Wait times varied by type of service. Residents and staff reported long wait times for appointments with psychiatrists and other specialists in some districts because few accepted Medicaid.
- **Continuity of care.** Care-coordination services and pre-release discharge planning were targeted to those with very severe medical or mental health needs during incarceration, a minority of the entire population, which left most residents without these services.
- **Lack of information to transition to other insurance if ineligible for Medicaid**. A few residents were uninsured because they earned income exceeding the Medicaid threshold. They wanted to enroll for other insurance but did not know how to identify affordable options and go about enrollment. Halfway house staff and case managers were not always able to provide information about other subsidized options.

Challenges particular to halfway houses

The structure and services halfway houses offer are designed to help with reentry but can also introduce unique challenges.

- **Staff helpfulness.** In most programs, halfway house staff provided some assistance identifying community providers and transportation options, but some residents reported staff lacking in their willingness to help. Others reported that staff sometimes did not have enough knowledge about policies and community care to be helpful.
- **Lack of transportation provisions.** Although residents understood that halfway house transportation policies were geared towards promoting self-sufficiency, they generally noted that having to walk or use public transportation to reach health care appointments was difficult and time-extensive because of distance, limited public transportation options in certain areas, and residents' unfamiliarity with the geographic area.
- **Community passes.** Because halfway houses are accountable for residents' whereabouts, people had to get a pass from staff before leaving and provide documentation upon their return. Passes for health-related appointments had a typical maximum of three hours. Residents perceived that three hours was not sufficient, especially considering travel time, wait time at the doctor's office, and the appointment itself.
- **Pass monitoring perceived as embarrassing.** Some residents felt that their reasons for extension requests were sometimes not trusted, that it could be difficult to reach the correct staff member, or that sanctions could be imposed as a result of being late, regardless of whether they called. In some cases, these barriers led residents to avoid seeking care. Similarly, according to parole staff, DOC policy is for residents to call from a provider's landline to confirm their presence at that location. This was often perceived as embarrassing by residents.

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- **Medication management.** Residents were generally not allowed to keep medications on their person[4] and expressed frustration they were dependent on staff availability to access prescription or over-the-counter medications when needed. Additionally, some residents and staff were concerned that by residents not managing their own medications, they were not building capacity to do so after halfway house exit. Some residents also expressed concerns that staff were not familiar with the medicines they were administering.

Quantitative Findings

Study group characteristics

Appendix Table C1 describes the demographics, criminal history, recidivism, and health history of the Study 1 halfway house residents by study group. As might be expected by the fact that they are drawn from the same population (i.e., community release), the treatment and comparison groups were not significantly different on most characteristics; only parole district and "other" current offense were significantly different at the $p<0.05$ level. Overall, 90% of residents were male, with roughly equal proportions of white and black residents (42% and 39%, respectively). Most had a high school diploma or less. On average, residents were 35 years old at halfway house entry, 23 years old at their first incarceration, and had previously been incarcerated 3.4 times. The average length of stay in prison prior to halfway house entry was just over two years (785 days), and property offenses were the most common type of offense leading to the current incarceration. Sixty-two percent of residents had a history of at least one chronic physical health condition, such as diabetes, heart disease, high blood pressure, or chronic back pain. Similarly, 61% of residents had a history of a substance use disorder. Nearly one-quarter had a history of any mental health condition, such as anxiety, depression, or bipolar disorder.

Appendix Table C2 describes the demographics, criminal history, recidivism, and health history of the Study 2 halfway house residents by study group. Generally, Study 2 participants had similar characteristics to Study 1 participants. However, the Study 2 treatment and comparison groups were more different from each other than the Study 1 treatment and comparison groups, consistent with the design of Study 2 as an observational study. The Study 2 treatment group was significantly older than the Study 2 comparison group at halfway house entry, had more prior incarcerations, had a longer length of stay in prison, had greater mental health needs, and had more history of physical health conditions such as cancer and heart disease. This is consistent with the design of Study 2 as an observational study, with the treatment and comparison groups composed of individuals with different legal custody statuses (i.e., parole vs. community release). Because those on parole tend to have longer sentences than those on community release, they also tend to be older, both of which could contribute to poorer health status.

Health care utilization in prison

Appendix Table C3 describes prison health care utilization among Study 1 and Study 2 participants during the last six months of incarceration, when all participants received care from DOC providers. Based on the information available in the medical charts, we examined three types of utilization: clinical encounters or

[4] There were some reported exceptions: one staff person specified that residents could keep their own asthma inhalers, and one resident in one district noted that the halfway house now allowed them to keep over-the-counter medications.

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health consultations (analogous to seeing an outpatient provider), medication orders, and infirmary admissions (analogous to a hospitalization within the correctional facility). We also were able to measure medical and mental health hospitalizations in external facilities using the DOC administrative data; however, these were extremely rare.

About 64% of Study 1 participants had at least one clinical encounter or health consultation, 55% received medications, 2% had been admitted to the infirmary, and none had medical or mental health hospitalizations. The treatment and comparison groups were not significantly different on any utilization variable.

Overall, health care utilization in prison prior to halfway house entry was slightly higher among Study 2 participants than Study 1 participants. Seventy-two percent of Study 2 participants had at least one clinical encounter or health consultation in the last six months of incarceration, 58% received medications, 4% had been admitted to the infirmary, 1% had a medical hospitalization, and none had a mental health hospitalization. These higher utilization rates tended to be driven by the treatment (i.e., parole) group. The treatment and comparison groups in Study 2 were not significantly different on whether they received any service; but the treatment group had a significantly higher number of clinical consultations, medication orders, and infirmary admissions. These findings are consistent with our earlier findings that people on parole tended to have greater health care needs than people on community release.

Medicaid enrollment

Appendix Table C4 describes Medicaid enrollment among the Study 1 treatment group, who were eligible for Medicaid through the pilot program.[5] Overall, 137 (93%) residents from this group were enrolled in Medicaid at any time during their halfway house stay. Just over half of those enrolled had access to Medicaid for three months or less while in the halfway house, while only three participants were enrolled in Medicaid for twelve months. The short enrollment periods could be explained by when the individuals were enrolled in relation to when they entered the halfway house or by their overall lengths of stay in the halfway house.

Appendix Table C5 examines further the question of when people were enrolled during their stay. Over one-third (37%) of people enrolled were enrolled more than 60 days after they entered the halfway house, whereas about one-quarter (27%) were enrolled on or before their first day in the halfway house. These results suggest that the relatively short amount of time people in Study 1 were enrolled in Medicaid while in the halfway house is likely a result of when they were enrolled. Because this group was enrolled in Medicaid as part of the pilot program, this outcome is not unexpected. Rather than being enrolled as part of discharge planning when they were leaving prison, residents enrolled through the pilot were enrolled on specific dates when DOC and DSS staff came to the halfway houses to enroll everyone who lived there on that particular day. Thus, the enrollment could have occurred at any point during their halfway house stay, depending on the day they entered the halfway house and the day staff came in to enroll people.

[5] For this report, we measured Medicaid enrollment only while residents were living in the halfway house. However, people were typically eligible for one year before they would need to recertify. At the time of the study, enrollment could also be terminated due to reincarceration.

Appendix Tables C6 and C7 describe Medicaid enrollment among the Study 2 treatment group, who were eligible for Medicaid because of their status as "parolees". In total, 204 (71%) residents from this group were ever enrolled in Medicaid during their halfway house stay (Appendix Table C6). About 5% were enrolled in Medicaid for twelve months, whereas a little over 40% had access to Medicaid for three months or less. In contrast to Study 1, over 82% of the participants were enrolled in Medicaid on or before their first day in the halfway house (Appendix Table C7). These results are also expected, since enrollment for people released to parole in Connecticut often takes place during the discharge planning process. Taken together, our results suggest that for the parole group, the number of months with Medicaid enrollment in the halfway house depends largely on residents' length of stay in the halfway house rather than the timing of enrollment.

Health care utilization in the halfway house

Utilization among the "No Medicaid access" (comparison) groups

As previously mentioned, the comparison groups in each study were required to return to DOC facilities for any non-emergency health care needs. Appendix Table C8 shows prison health care utilization among the Study 1 and Study 2 comparison groups after entering the halfway house. Roughly 28% of the Study 1 comparison group had at least one clinical encounter or consultation, 25% received medication orders, 1% were admitted to the infirmary, 1% had medical hospitalizations, and none had mental health hospitalizations. The proportion of people receiving clinical encounters/consultations and medications dropped substantially compared to services received while in prison. The total number of services and the average monthly number of services also decreased.

Similarly, after entering the halfway house, 25% of the Study 2 comparison group had at least one clinical encounter, 20% received medication orders, 1% were admitted to the infirmary, 0.04% had medical hospitalizations, and 0.02% had mental health hospitalizations. Again, we see a substantial drop in health care services received for those who were required to go back to DOC facilities for care after entering the halfway house.

Utilization among the "Medicaid access" (treatment) groups

Appendix Table C9 provides detail on Medicaid utilization among Study 1 and Study 2 treatment groups for the period from their enrollment in Medicaid to their release from the halfway house. Among Study 1 treatment group members, roughly 17% received outpatient visits for non-substance use or mental health concerns, 2% for substance use, and about 13% for mental health. About 42% received medication for physical medical concerns, while mental health- and substance use-related medications were prescribed to 8% and 1% of the group, respectively. Other common forms of care received included dental (15%), vision (14%), acute care for injuries (7%), and emergency department visits (13%).

In contrast, Study 2 treatment group members had higher rates of Medicaid utilization for nearly every type of care. Close to one-third (33%) sought outpatient care for non-substance use or mental health concerns, 14% for substance use, and about 31% for mental health. Approximately 53% of the group had prescriptions for physical medical concerns, 22% were prescribed mental health-related medications, and 4% were prescribed substance use-related medications. Other common forms of care included dental (33%), vision (20%), acute care for injuries (12%), and emergency department visits (29%). Additionally, about 2%

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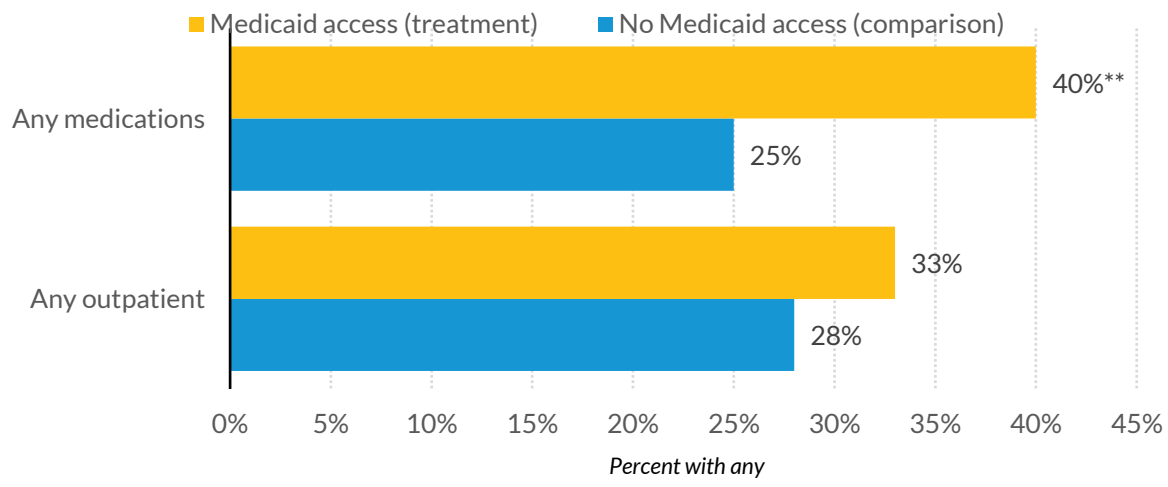
were hospitalized for a substance use diagnosis and 5% were hospitalized for physical medical concerns. Higher utilization among this group is not surprising. As described in the previous sections, on average, Study 2 participants were enrolled in Medicaid for longer by virtue of getting enrolled on or before their first day in the halfway house. Additionally, people on parole tended to have greater health care needs than people on community release, and thus may have been more likely to seek care.

Effect of Medicaid access on health care utilization in the halfway house

Given what we learned through the qualitative study—that people were reluctant to return to DOC facilities for care—we would expect that those with access to Medicaid would be more likely to seek care while in the halfway house than those without access to Medicaid, controlling for prior health care utilization, health needs, length of stay in the halfway house, and demographic characteristics. As mentioned, we conducted logistic regressions for three outcomes—any outpatient care, any inpatient care, and any medications—to answer this question, with access to Medicaid being the explanatory variable of interest. Figure 2 shows the predicted probability of receiving two types of care (any medications and any outpatient care) while in the halfway house for both the Study 1 treatment and comparison groups.[6] Those with access to Medicaid were significantly more likely to receive any medications (40%) compared to those without Medicaid access (25%). They also had a slightly higher probability of receiving any outpatient care, but this difference was not significant (see Appendix Table C10 for full regression results).

FIGURE 2

Predicted Probabilities of Receiving Any Medications and Any Outpatient Care in the Halfway House by Study Group, Study 1



Note: * p < 0.10; ** p < 0.05; *** p < 0.001.

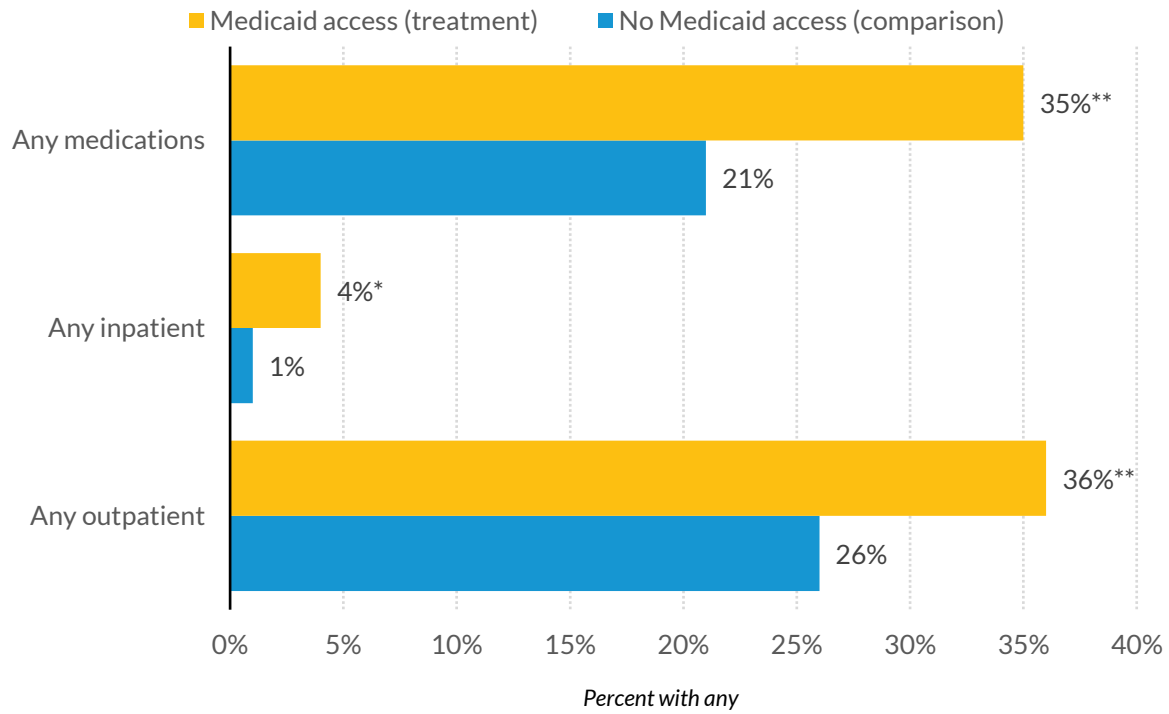
Figure 3 shows similar results for Study 2. Those with access to Medicaid were significantly more likely to receive any medications (35%) and any outpatient care (36%) compared to those without Medicaid

[6] There were too few observations to produce reliable regression results for "any inpatient care" for Study 1.

access (21% and 26%, respectively). Those with Medicaid were also more likely to receive inpatient care, although this effect was only marginally significant (see Appendix Table C11 for full regression results).

FIGURE 3

Predicted Probabilities of Receiving Any Medications, Any Inpatient Care, and Any Outpatient Care in the Halfway House by Study Group, Study 2



Note: * p < 0.10; ** p < 0.05; *** p < 0.001.

Effect of Medicaid access on recidivism

Appendix Table C12 shows the relationship between Medicaid access and recidivism for Study 1 participants. Study 1 compares community release residents who were enrolled in Medicaid as part of a pilot program with similarly situated community release residents one year before and one year after the pilot program (i.e., Study 1 does not include anyone on parole). Specifically, we examined three recidivism measures within one year of halfway house entry: any reincarceration, reincarceration for a new crime, and reincarceration for a technical violation.

Our findings indicate that access to Medicaid does not significantly predict reincarceration for a technical violation, but it does significantly predict reincarceration for a new crime. Access to Medicaid was marginally significant for any reincarceration. All else equal, the treatment group was more than twice as likely (odds ratio (OR)=2.715)[7] to be reincarcerated for a new crime compared to the comparison group.

[7] An odds ratio describes the difference in the odds or likelihood of an outcome given a change in the variable of interest. An odds ratio of one means there is no difference, while an odds ratio of less than one means the outcome is less likely and an odds ratio of greater than one means the outcome is more likely.

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These results equate to an 11% probability of reincarceration for a new crime for the treatment group and a 5% probability for the comparison group.

TABLE 3

Predicted Probability of Recidivism for Study 1 Participants, by Study Group and Recidivism Type

Study group	Any reincarceration	Reincarceration for new crime	Reincarceration for technical violation
Treatment	22.9%	11.4%	14.5%
Comparison	15.4%	5.1%	12.8%

Under the assumption that more extensive health issues (especially for substance abuse) may be associated with recidivism, we also controlled for substance abuse, mental health, and medical health needs in the analysis using DOC classification scores that assess the amount of care or treatment required for each type of need. None of the scores significantly predicted increased recidivism, but having a medical score above three (i.e., having more need for medical supervision and treatment) did predict decreased likelihood of reincarceration for a technical violation.

Other characteristics that significantly predicted outcomes included demographics and criminal history. Men were more likely to be reincarcerated for any reason and for a technical violation, and black residents were less likely to be reincarcerated for a technical violation. Residents with more prior incarcerations and those with a property or public order offense were more likely to be reincarcerated (both for any reason and for a technical violation). Meanwhile, residents with a longer length of stay in prison and with a drug offense were less likely to be reincarcerated for a new crime.

Discussion and Implications

Our findings suggest that providing access to Medicaid for halfway house residents was largely beneficial for both residents and staff compared to requiring residents to return to DOC facilities to receive care. Findings from the qualitative study suggested that, despite a few challenges, people were more likely to seek care when they could access community-based providers. Residents no longer avoided seeking care and perceived that the treatment they received was of higher quality and gave them more choice than the services in prison and jail medical units. Staff, too, perceived care in the community to be more efficient, especially from a coordination and logistical point of view.

Compared to other studies of incarcerated populations, the people included in this study had a slightly higher prevalence of chronic medical conditions, lower prevalence of mental health conditions, and about the same prevalence of substance abuse. Prior research has found roughly 50% of individuals incarcerated in state prisons have had at least one chronic medical condition (Maruschak, Berzofsky & Unangst, 2016), compared to between 57% and 75% of our study populations. About 56% of incarcerated people have experienced mental illness (James & Glaze, 2006), whereas the prevalence of mental health conditions in our study ranged from 20-24%. Finally, about 58% of incarcerated individuals experienced drug dependence or abuse (Bronson, Stroop, Zimmer & Berzofsky, 2017) compared to between 58% and 62% of people in our study.

Comparisons of care received from DOC before leaving prison and care received from DOC while in the halfway house are consistent with our qualitative findings, in that they suggest that community release residents were less likely to seek and receive care once they had been released to the halfway house. For example, while nearly 70% of the Study 1 comparison group had a clinical encounter or consultation prior to being released, only 28% of that group returned to DOC for similar care after release. Similarly, half of the same group had medication orders before release, compared to 24% after release. We found similar patterns for Study 2. Results from logistic regressions estimating the effect of Medicaid access on utilization largely underscore these findings. For both studies, although residents who had access to Medicaid also were less likely to receive care in the halfway house as compared to during incarceration, they were significantly more likely to receive some types of care in the halfway house than residents who did not have access to Medicaid.

Despite these promising findings, our analysis of the effect of Medicaid access on recidivism revealed counterintuitive results. Halfway house residents in the treatment group (i.e., those who had access to Medicaid) were significantly more likely to be reincarcerated for a new crime within a year of entering the halfway house. While the difference is statistically significant, the absolute probabilities of reincarceration for a new crime is relatively low for both groups compared to national statistics. Our results found that 11% of the treatment group and 5% of the comparison group were reincarcerated for a new crime, compared with a national-level study that found 18% of people were reincarcerated (Durose, Cooper, & Snyder, 2014). Of those who were reincarcerated for a new crime, the crimes were largely non-violent, with property (57%) making up the majority of offenses. One-quarter of new offenses were person offenses, 7% were public order offenses, 4% drug offenses, and 7% other offenses.

It is not immediately clear from this analysis why those with access to Medicaid were more likely to recidivate. As noted in the results, the two groups had the same community release status and were very similar on the observable characteristics we examined; however, it seems unlikely that the access to Medicaid itself is the causal factor. Although residents with Medicaid had more opportunities to leave the halfway house unsupervised to attend medical or mental health appointments than those without Medicaid, the recidivism events among the treatment group largely occurred after residents had left the halfway house. We are unable to assess this particular question with the data we have, and additional research is needed to disentangle this result and whether this effect may be driven by a particular subgroup.

Limitations

This study, like all research, is subject to limitations. First, although we structured the medical chart data collection to mirror the information available in Medicaid claims as much as possible, the two data sources are not perfectly comparable. The environments in which people receive care recorded in each data source are much different. We also found it difficult to collect the level of detail necessary to make more fine-grained comparisons between the DOC medical charts and the Medicaid claims (e.g., services received for substance abuse or mental health conditions versus chronic physical conditions) due to information not being recorded in the charts as well as the resources required to collect that much detail for the entire study population. Second, this study does not include health care provided by other forms of insurance, such as Medicare (unless the person is eligible for both Medicaid and Medicare), private insurance, or care provided to veterans through the Department of Veterans Affairs. However, based on the qualitative data, these

types of insurance were not very common among the study population. Third, due to data limitations, we were not able to control for utilization in the recidivism analyses. Finally, these results describe only Medicaid enrollment and health care utilization in the halfway house. Future research should examine not only the transition from incarceration to the halfway house, but also how that compares to the transition from the halfway house to the community at large.

Dissemination and Close-out Activities

The project team has presented preliminary findings from this study at the Annual Meetings of the American Society of Criminology in 2016-2019. Additionally, we presented findings at the Academy of Criminal Justice Sciences conference in 2019. We have also published an Urban Institute report and blog post presenting findings from the qualitative component of the study, which can be found on Urban's website.[8] The project team has uploaded de-identified data collected during the study to the National Archive of Criminal Justice Data, in accordance with NIJ requirements. Finally, the team will submit at least two journal articles for publication. We plan to use one of these articles to examine comparisons of diagnosis and treatment in correctional institutions with that in the community and the other to discuss lessons learned from comparing correctional health care data with Medicaid data.

[8] Available from https://www.urban.org/research/publication/expanding-medicaid-access-halfway-house-residents and https://www.urban.org/urban-wire/nine-ways-improve-postincarceration-health-care-access.

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Appendix B: Focus Group Protocols for Qualitative Data Collection

Appendix B: Focus Group Protocol

Evaluating Early Access to Medicaid as a Reentry Strategy

Focus Group Protocol

Date of Focus Group:
Time:
Program Name:
Parole District:
DOC Medical for this District:
Circle one: Community Release / Parole and Others
Urban Institute lead:
Other Urban staff:

Introduction

Hello and thank you for coming today. My name is _____ and this is my colleague, _____. We're from the Urban Institute, a non-profit research organization in Washington, DC. We've invited you here today to share your experience and opinions about getting health care at halfway houses in Connecticut. This project is funded by the National Institute of Justice, and will help us learn about health care in halfway houses and how Medicaid health insurance might help people who have been incarcerated.

If you decide to participate, we will talk together in a group for about one hour. We will ask questions about how easy or hard it is to get to a doctor, the quality of health care you've received, and your overall health. We will ask general questions about your experience getting health care for any medical, mental health, and drug or alcohol issues you might have. But, we will **not** ask you for details about any specific health conditions.

Informed Consent (verbal)

Before we started, I will go over a few ground rules, and let you decide if you want to participate or not.

#1. This discussion is **voluntary.** That means you can choose to be here or not, and you can stop participating at any time. You can also refuse to answer any question you don't want to answer. Your decision about participating and the information you provide will not affect the rest of your sentence, your health care, or any services you receive in any way.

#2. This discussion is **confidential,** meaning we will keep the information you tell us private. We will not tell halfway house staff, DOC staff, your parole officer, your doctor, or anyone else outside of our Urban Institute team what you say during this discussion, or even if you participate at all. After the focus group, we will write our report about the health care issues in halfway houses. The report will be anonymous, meaning that we will not use your name and we will not connect what you said with you personally. Any reports we write will be anonymous, meaning we will not use your name and we will disguise any important details so

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your name cannot be connected with your comments There is **only one exception** to this rule: if you tell us that you plan to commit a crime or harm yourself or a child, we may be required to report that.

We will keep this conversation private, and ask you to do the same. The Urban Institute cannot be responsible if other people in the group repeat something you say. For example, if you mention taking medications for HIV, we cannot stop someone in the group from telling another resident or a staff member. **Please respect the privacy of others in the group and do not repeat anything you hear in this discussion.**

[Name of person] will be taking notes. To protect everyone's privacy, we will only use first names today. You can even use a fake name or nickname if you prefer. Please write the name you want us to call you on the name card in front of you.

We would also like your permission to audio record this discussion to make sure we get complete and accurate notes. We will destroy the recording as soon as we make sure our notes are correct.

Are there questions before we get started? [PAUSE AND DISCUSS QUESTIONS]

Is everyone okay with us recording the discussion? Does anyone object to our recording the discussion? [PAUSE AND DO NOT RECORD IF ANYONE OBJECTS]

We are just about ready to begin. If anyone doesn't want to participate, we thank you for listening and ask you to please leave the room now. Staying here means that you agree to be a part of the focus group and that you agree not to repeat anything you hear outside of this group discussion. Are there any further questions? [PAUSE FOR ANY DEPARTURES; DISCUSS ANY QUESTIONS]

Discussion Prompts and Topics

Thank you, let's get started. As we ask questions about health and health care, please think broadly about any kinds of medical or mental health or drug and alcohol issues you might have. Also, please keep in mind that there are no "right" or "wrong" answers. Be as open as you are comfortable being, and please share ***your*** views, even if they are different from what others are saying.

1. Opening Questions

Icebreaker around the room:

- How long have you been out of DOC and in this program?

1.1 How much do physical health, mental health, or drug/alcohol issues affect your life? (Alt: move this to section 5)

- Probe if needed: How do they affect your ability to:
    - Do everyday activities?
    - Get a job or go to school/work?
    - Participate in programs you are supposed to attend?
    - Maintain good relationships with your family, friends or support system?
    - Stay sober?
    - Stay out of trouble with the law?

2. Health care access and continuity in the halfway house

2.1 Since you first came to the halfway house, how often have you *needed or wanted* to see a doctor or nurse or another kind of health care provider—whether or not you were able to? This could be for a physical health, mental health or drug or alcohol problem.

- Was this for an ongoing problem or something recent?
- Have you wanted help for some types of problems more than other types?

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2.2 Were you able to get the help you needed?

- Was this for an ongoing problem or something recent?
- Is it easier to get help for some types of problems than others?

2.3 How often have you visited a doctor or nurse or counselor or another health care provider since coming to the halfway house?

- Was this for an ongoing problem or for something recent/new?
- Did you see someone here in the halfway house or need to go someplace else?
- *Note: We're interested in learning more about how easy or hard to get the health care you need, especially from health care providers who are located outside of the halfway house. We're using the words doctor or nurse, but we're interested in about knowing other health care providers too—like counselors or therapists or dentists—if those are also people you have needed or wanted to see.*
- *Note: If no one wanted or needed health care, phrase forthcoming health care access questions as hypothetical.*

2.4 What happens here at the halfway house when you need or want to see a doctor or nurse or another kind of health care provider?

- Who do you need to talk to?
- What happens next?

2.5 What happens here at the halfway house when you need or want to get prescription medications?

- Who do you need to talk to?
- What happens next?

2.6 Since you first came to the halfway house, was there a time when you would have to go back to the DOC if you wanted to see a doctor or nurse or another kind of health care provider?

- Did you personally have to go back to the DOC to see a doctor or nurse? How long ago was that?
- *Note: purpose is to know whether people are reporting on personal experiences or the general policy and environment of the halfway house. Either is okay.*

3. Process of getting care at DOC facilities & potential barriers *[Applicable if some had to go back to DOC for care since release (Q2.6). Also relevant for people on community release; may also be relevant to people on parole if they changed status during HWH stay]*

3.1 What happened when you would go from here to the DOC doctor/nurse for care?

- How did you get there? (e.g., prison van, program van, with staff member, public transportation, etc.)
- Were you handcuffed?
- Did you get searched?
- How much of the day did the whole trip take?
- Did you ever have problems with work or other programs because of how long it took?

3.2 How was your experience with the doctors and nurses in the DOC?

- How did you feel they talked to you? (e.g. respectful or condescending—avoid leading)
- Did you feel that they judged you or were accepting? If you felt judged, what for?
- How easy or hard were they to talk to? Did you feel that they listened and understood you?
- Did they spend time with you, or seem to rush?

3.3 How good were the DOC doctors and nurses at treating the problems you went to see them for?

- How well did they understand your medical condition?
- Did you feel you got what you needed?
- Do you feel you got good care for your problem?

3.4 If you went because of an ongoing problem, did you get the same treatments or medications that you got while you were incarcerated?

- Is that a good or a bad thing?
- Why did things change? (possible reasons—avoid leading: you didn't want to take them anymore, couldn't get them anymore, doctor decided to change meds)

3.5 How easy or hard was it to get an appointment for a health care visit when you needed to go back to the DOC and to get to your appointment?

- How long was the wait from when you first asked to go, to when you actually got an appointment, and then were seen by a doctor or nurse?
- How did (do) staff here at the halfway house react when you or others want(ed) to see a doctor or nurse and had to go back to the DOC for care?
- Are there any staff here at the halfway house that help with health problems, mental or emotional problems, drug and alcohol problems? How do they help?

3.6 Was there ever a time when you wanted or needed to visit the DOC doctor/nurse, but you put it off or decided not to go?

- What were some of the reasons? Is there anything that made it hard to go?
- How bad would a problem need to be before it was worth going?

3.7 Are there good parts about going back to a DOC clinic to get health care, or things that work well?

3.8 What would make the experience of getting health care at DOC better?

3.9 Is it still true that people have to go back to the DOC to see a doctor or nurse?

- If yes, under what circumstances do people need to go back to DOC?
- If no, when did this change?

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4. Process of getting care thru community-based providers & potential barriers *[Applicable to all]*

4.1 What happens when you go from here to a clinic/doctor/nurse in the community?

- *Make a note if no one in FG had personal experience of using health services in the community during their HWH stay. Reframe Qs as hypothetical, as applicable. Can also ask Q4.11 about health care in community before incarceration and ask opinions based on that.*
- How do you get there? (e.g., program van, with staff member, public transportation, etc.)
- Do you get handcuffed?
- Do you get searched?
- How much of the day does the whole trip take?
- Have you had problems with work or other programs because of how long it takes?

4.2 What has your experience been with the doctors and nurses in the community clinic?

- How did you feel they talked to you? (e.g. respectful, condescending—*avoid leading*)
- Have you felt judged by doctors or nurses? If so, what for?
- How easy or hard were they to talk to? Did it seem like they listened and understood you?
- Did they spend time with you? Seem to rush?

4.3 How good were they at treating the problems you went to see them for?

- How well did they understand your medical condition?
- Did you feel you got what you needed?
- Do you feel you got good care for your problem?

4.4 Had you been to this doctor, nurse or clinic in the community before?

- Had you been there before coming to the HWH
- How did you find out about them and decide to go there?
- How long have you been going there? Since when?

4.5 If you went because of an ongoing problem, did you get the same treatments or medications that you got while you were incarcerated?

- Is that a good or a bad thing?
- Why did things change? (possible reasons—avoid leading: you didn't want to take them anymore, couldn't get them anymore, doctor decided to change meds)

4.6 How easy or hard is it to get an appointment for a health care visit and to get to your appointment?

- How long is the wait from when you first ask to go, to when you actually got an appointment, and then were seen by a doctor or nurse?
- How do staff here at the halfway house react when you ask to see a doctor or nurse?
- [Ask only if skipped section 3, "process of care in DOC"] Are there any staff here at the halfway house that help with health problems, mental or emotional problems, drug and alcohol problems? How do they help?

4.7 How much does it cost you to go to the doctor/nurse/clinic?

- Do you have to pay for transportation there and back? How much?
- Do you get a bill from the doctor/nurse/clinic? Do you have to pay it?

4.8 Was there ever a time when you wanted or needed to visit a doctor/nurse, but you put it off or decided not to go?

- What were some of the reasons? Is there anything that makes it hard to go?
- How bad would a problem need to be before it's worth going?

4.9 What works well/is good about getting health care at a clinic/doctor/nurse in the community [vs. DOC]?

4.10 What would make the experience of getting health care in the community better?

4.11 Where did you usually go to get health care (e.g., see a doctor or nurse) before you were incarcerated? [Lower priority if people received community health care while in HWH.]

- Do you go to the same clinic/doctor/nurse now? *[asked in 4.4 also]*
- What kind of health insurance did you have before you were incarcerated?
- Did you feel that health insurance helped you, or was a difficulty? How so?
- What about now?

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5. Health status after prison/jail release *[Applicable to all]*

Alt. 1.1. How much do physical health, mental health, or drug/alcohol issues affect your life? (Alt: move this to section 5)

- Probe if needed: How do they affect your ability to:
    - Do everyday activities?
    - Get a job or go to school/work?
    - Participate in programs you are supposed to attend?
    - Maintain good relationships with your family, friends or support system?
    - Stay sober?
    - Stay out of trouble with the law?

5.1 Do you think your overall health has gotten better, worse, or stayed the same **since entering the halfway house** [compared to when you were incarcerated]?

- What has made it easier or harder to get the health care you need?
- Has it gotten easier or harder to take care of yourself and/or your own health? How so?

5.2 We talked earlier about physical health, mental health, or drug/alcohol issues and how they affect your everyday life. Have these different aspects/parts of your health changed **since entering the halfway house** [compared to when you were incarcerated]?

- Are some types problems better now, while others are the same or worse?
- Which ones and why (if you are comfortable discussing that)?
- Are some types of problems easier to get help for than others?

5.3 Do you currently use the same treatments or medications that you got while you were incarcerated?

- Is that a good or a bad thing?
- Why did things change? (possible reasons—avoid leading: you didn't want to take them anymore, couldn't get them anymore, doctor decided to change meds)

6. Effects of gaining Medicaid *[Applicable if some had to go back to DOC for care since release (Q2.6). Relevant for people on community release those who have had to go back to DOC for care since release; may also be relevant to people on parole if they changed status during HWH stay]*

6.1 We're going to switch gears now a little to talk about health insurance., Who in the room currently has Medicaid health insurance?

- **For those who said yes:** When were you enrolled in Medicaid? [Was it right after you got out of jail/prison? Weeks after? Just recently?]
- **For those who said no or don't know:**
    - Do you know if you're eligible to get Medicaid right now while you're in the halfway house and see a doctor or nurse in the community?
    - **Possibility of private insurance, ACA coverage, or no insurance:** Do you have another kind of insurance? Do you make too much money for Medicaid?
- *Note: Other names for Medicaid include Husky, LIA (Low Income Adults Medicaid), Medical Assistance. If participants ask, explain that it can depend on their personal situation and refer them to speak with program staff after the discussion.*

6.2 What has been good about having Medicaid health insurance instead of going to the DOC doctor/nurse?

- What has been difficult or bad about having Medicaid health insurance and getting care in the community, instead of going back to DOC?

6.3 Would you want to go back to a doctor/nurse in the DOC if you could? Why or why not?

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6.4 How do you feel having Medicaid has affected (will affect) your health, mental health, or drug and alcohol issues compared to having to back to DOC for care?

- Have they gotten/will they get better, worse, stay the same?
- Why do you think that is?

6.5 Since having Medicaid, have you noticed a difference in how you take care of yourself and your health conditions?

- Do you take better, worse, the same care of yourself?
- Why do you think that is?

6.6 If not much response to the above: What kind of health insurance (or medical assistance) did you have before you were incarcerated?

- Did you feel that having health insurance helped you? How?
- Did you feel that having health insurance was a difficulty? How?

6.7 Earlier we talked about your ability to do everyday activities, like work, school or programs, stay sober, and stay out of trouble with the law. Have you noticed any difference in your ability to do these things since you were enrolled in Medicaid health insurance?

7. Health care access during incarceration *[Lower priority—ask if time available]*

7.1 Would you say your overall health got better, worse, or stayed the same **while you were incarcerated [compared to before you were in DOC]?**

- What made it easier or harder to get the health care you needed?
- Did it get easier or harder to take care of yourself and/or your own health? How so?

7.2 What did you have to do to get health care (e.g., visit the clinic or go to the infirmary) while you were incarcerated?

- What kind of health care? How easy or hard was it to see a doctor when you wanted to?
- On a regular basis or only a few times?
- Did you go for smaller concerns, or only urgent problems?
- Was it easier or harder to get help for certain types of problems?

7.3 What did you have to do to get prescription medications from a doctor or nurse while you were incarcerated?

- On a regular basis? How easy or hard was it to fill a prescription?
- Did you ever ask for or feel like you needed a new type of prescription medication? What happened?
- Did you get prescriptions for smaller concerns, or only if you had an urgent problem?

7.4 Did you get help for drug or alcohol problems while you were incarcerated?

- What kind of help?
- On a regular basis? For the whole time you were incarcerated or just some time?

8. Wrap-up

8.1 How much do you think physical health, mental health, or drug/alcohol issues will affect your life differently **when you leave the halfway house** [compared to now]?
What do you think would help you with these health issues?

8.2 Do you have any other thoughts or suggestions about health care for halfway house residents that you

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would like to share with us?

Thank you very much for your time and for sharing your insights with our research team.

Remember to distribute the questionnaires!
As a backup, estimate and note:
Participants
Ages
Race/Ethnicity
Time in HWH

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Appendix C: Tables

APPENDIX TABLE C1

Descriptive Statistics for Study 1 Participants

	Mean					
	Total	No Medicaid access (Comparison)	Medicaid access (Treatment)	p-value	Min	Max
Demographics and Criminal History	n=380	n=233	n=147			
Male	0.90	0.88	0.93	0.08	0	1
Race/ethnicity						
White	0.42	0.45	0.37	0.13	0	1
Black	0.39	0.39	0.40	0.83	0	1
Hispanic	0.18	0.16	0.22	0.11	0	1
Asian	0.01	0.00	0.01	0.74	0	1
Education level						
Less than HS diploma	0.38	0.38	0.37	0.95	0	1
HS diploma	0.46	0.45	0.47	0.78	0	1
Any college	0.16	0.17	0.16	0.78	0	1
Any emergency contact	0.96	0.97	0.96	0.74	0	1
Age at halfway house entry	35.16	34.38	36.39	0.05	19	76
Age at first incarceration	22.52	22.33	22.84	0.54	14	76
Number of prior incarcerations	3.37	3.34	3.43	0.82	0	22
Alcohol/drug score 3 or above	0.91	0.92	0.89	0.37	0	1
Mental health score 3 or above	0.14	0.14	0.13	0.73	0	1
Medical score 3 or above	0.19	0.18	0.20	0.76	0	1
Length of stay in prison (days)	785.18	765.73	816.01	0.66	19	8950
Most serious current offense						
Person	0.23	0.22	0.25	0.46	0	1
Property	0.41	0.44	0.35	0.07	0	1
Drug	0.24	0.24	0.26	0.62	0	1
Public order	0.04	0.05	0.03	0.25	0	1
Other	0.08	0.05	0.12	0.02	0	1
Parole district						
Norwich	0.46	0.51	0.37	0.01	0	1

	Mean					
	Total	No Medicaid access (Comparison)	Medicaid access (Treatment)	p-value	Min	Max
New Haven	0.54	0.49	0.63	0.01	0	1
1-Year Reincarceration	n=380	n=233	n=147			
Any	0.18	0.17	0.20	0.37	0	1
New crime	0.07	0.06	0.10	0.09	0	1
Technical violation	0.13	0.14	0.13	0.82	0	1
Medical History	n=198	n=111	n=87			
Physical health	0.62	0.66	0.57	0.23	0	1
Cancer	0.01	0.01	0.00	0.38	0	1
Diabetes	0.07	0.06	0.07	0.87	0	1
Heart Disease	0.04	0.06	0.01	0.07	0	1
Lung Disease	0.12	0.10	0.14	0.40	0	1
High Blood Pressure	0.12	0.14	0.09	0.27	0	1
Back Pain	0.37	0.37	0.37	0.98	0	1
HIV	0.01	0.00	0.02	0.11	0	1
Hepatitis	0.06	0.06	0.05	0.60	0	1
Tuberculosis	0.02	0.02	0.02	0.81	0	1
Mental health	0.23	0.24	0.21	0.55	0	1
Anxiety	0.11	0.12	0.10	0.76	0	1
Depression	0.09	0.09	0.09	0.96	0	1
Psychotic Disorders	0.02	0.03	0.01	0.44	0	1
Bipolar	0.02	0.02	0.01	0.71	0	1
ADHD	0.04	0.05	0.01	0.11	0	1
Other	0.05	0.05	0.03	0.51	0	1
Substance use	0.61	0.61	0.60	0.83	0	1
Alcohol	0.14	0.13	0.16	0.49	0	1
Cocaine	0.17	0.17	0.17	0.98	0	1
Opiates	0.26	0.25	0.26	0.85	0	1
Cannabis	0.29	0.32	0.25	0.34	0	1
Other	0.20	0.23	0.16	0.26	0	1
Number of Diagnoses	n=198	n=111	n=87			
Physical health	0.91	0.92	0.91	0.94	0	5
Mental health	0.31	0.35	0.26	0.36	0	4

	Mean					
	Total	No Medicaid access (Comparison)	Medicaid access (Treatment)	p-value	Min	Max
Substance use	1.06	1.09	1.01	0.62	0	4
Total	2.28	2.36	2.18	0.54	0	9

APPENDIX TABLE C2

Descriptive Statistics for Study 2 Participants

	Mean					
	Total	No Medicaid access (Comparison)	Medicaid access (Treatment)	p value	Min	Max
Demographics and Criminal History	n=1,179	n=892	n=287			
Male	0.90	0.90	0.90	0.95	0	1
Race/ethnicity						
White	0.32	0.31	0.33	0.47	0	1
Black	0.42	0.43	0.39	0.15	0	1
Hispanic	0.26	0.25	0.28	0.30	0	1
American Indian	0.00	0.00	0.00	0.57	0	1
Asian	0.00	0.00	0.00	0.26	0	1
Education level						
Less than HS diploma	0.42	0.41	0.45	0.19	0	1
HS diploma	0.46	0.47	0.43	0.20	0	1
Any college	0.12	0.12	0.12	0.79	0	1
Any emergency contact	0.98	0.98	0.97	0.44	0	1
Age at halfway house entry	36.00	35.58	37.30	0.01	19	70
Age at first incarceration	21.75	21.83	21.52	0.51	14	62
Number of prior incarcerations	3.53	3.38	3.97	0.04	0	31
Alcohol/drug score 3 or above	0.88	0.88	0.85	0.16	0	1
Mental health score 3 or above	0.14	0.12	0.21	0.00	0	1
Medical score 3 or above	0.19	0.19	0.21	0.52	0	1
Length of stay in prison (days)	1006.99	958.63	1157.80	0.03	0	12068
Most serious current offense						
Person	0.24	0.23	0.27	0.25	0	1
Property	0.40	0.41	0.38	0.44	0	1
Drug	0.26	0.27	0.22	0.08	0	1
Public order	0.05	0.05	0.05	0.97	0	1
Other	0.05	0.04	0.09	0.00	0	1
Parole district						
Norwich	0.11	0.10	0.11	0.53	0	1
New Haven	0.22	0.22	0.23	0.72	0	1
Hartford	0.28	0.27	0.30	0.31	0	1

	Mean					
	Total	No Medicaid access (Comparison)	Medicaid access (Treatment)	p value	Min	Max
Bridgeport	0.19	0.19	0.19	0.96	0	1
Waterbury	0.21	0.22	0.17	0.06	0	1
1-Year Reincarceration	n=1,179	n=892	n=287			
Any	0.23	0.22	0.24	0.60	0	1
New crime	0.06	0.07	0.05	0.13	0	1
Technical violation	0.17	0.16	0.20	0.10	0	1
Medical History	n=537	n=410	n=127			
Physical health	0.72	0.70	0.75	0.35	0	1
Cancer	0.02	0.01	0.04	0.02	0	1
Diabetes	0.04	0.04	0.05	0.68	0	1
Heart Disease	0.03	0.02	0.06	0.02	0	1
Lung Disease	0.17	0.17	0.19	0.55	0	1
High Blood Pressure	0.12	0.12	0.12	0.97	0	1
Back Pain	0.39	0.38	0.41	0.59	0	1
HIV	0.02	0.02	0.02	0.67	0	1
Hepatitis	0.07	0.07	0.07	0.93	0	1
Tuberculosis	0.04	0.03	0.06	0.05	0	1
Mental health	0.20	0.20	0.20	0.89	0	1
Anxiety	0.09	0.09	0.09	0.84	0	1
Depression	0.06	0.06	0.06	0.93	0	1
Psychotic Disorders	0.01	0.01	0.02	0.35	0	1
Bipolar	0.01	0.01	0.00	0.26	0	1
ADHD	0.02	0.03	0.00	0.04	0	1
Other	0.06	0.06	0.06	0.97	0	1
Substance use	0.61	0.62	0.58	0.46	0	1
Alcohol	0.09	0.08	0.13	0.15	0	1
Cocaine	0.19	0.19	0.20	0.92	0	1
Opiates	0.28	0.27	0.31	0.39	0	1
Cannabis	0.27	0.29	0.20	0.04	0	1
Other	0.19	0.18	0.22	0.26	0	1
Number of Diagnoses	n=537	n=410	n=127			
Physical health	1.05	1.01	1.18	0.14	0	5

	Mean					
	Total	No Medicaid access (Comparison)	Medicaid access (Treatment)	p value	Min	Max
Mental health	0.25	0.26	0.23	0.62	0	3
Substance use	1.02	1.01	1.05	0.73	0	5
Total	2.32	2.28	2.46	0.34	0	10

APPENDIX TABLE C3

DOC Healthcare Utilization in the 6 Months Before Halfway House Entry

	Study 1						Study 2					
		Mean						Mean				
Type of Utilization	Total	No Medicaid access (Comparison)	Medicaid access (Treatment)	Min	Max	p value	Total	No Medicaid access (Comparison)	Medicaid access (Treatment)	Min	Max	p value
	n = 198	n = 111	n = 87				n = 537	n = 410	n = 127			
Clinical encounters or consultations												
Any	0.64	0.68	0.59	0	1	0.14	0.72	0.71	0.75	0	1	0.46
Count	3.85	4.27	3.32	0	33	0.25	5.02	4.54	6.57	0	114	0.04
Monthly average	0.63	0.70	0.55	0	5.33	0.28	0.82	0.74	1.08	0	19	0.04
Medication orders												
Any	0.55	0.50	0.60	0	1	0.19	0.58	0.57	0.61	0	1	0.36
Count	2.10	2.05	2.17	0	15	0.77	2.63	2.38	3.46	0	34	0.01
Monthly average	0.35	0.33	0.36	0	2.50	0.73	0.43	0.39	0.56	0	5.67	0.01
Infirmary admissions												
Any	0.02	0.03	0.01	0	1	0.44	0.04	0.04	0.06	0	1	0.36
Count	0.02	0.03	0.01	0	1	0.44	0.05	0.04	0.09	0	3	0.05
Monthly average	0.002	0.002	0.002	0	0.17	0.86	0.01	0.00	0.01	0	0.50	0.01
Medical hospitalizations												
Any	0.00	0.00	0.00	0	0	-	0.01	0.00	0.02	0	1	0.21
Count	0.00	0.00	0.00	0	0	-	0.01	0.00	0.03	0	3	0.08
Monthly average	0.00	0.00	0.00	0	0	-	0.00	0.00	0.01	0	0.50	0.08
Mental health hospitalizations												
Any	0.00	0.00	0.00	0	0	-	0.00	0.00	0.00	0	0	-
Count	0.00	0.00	0.00	0	0	-	0.00	0.00	0.00	0	0	-
Monthly average	0.00	0.00	0.00	0	0	-	0.00	0.00	0.00	0	0	-

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APPENDIX TABLE C4

Number of Months with Medicaid in the Halfway House among Study 1 "Medicaid Access" (Treatment) Group

Number of Months	Frequency	Percent
1	10	7.3%
2	36	27.0%
3	26	19.0%
4	15	10.9%
5	16	11.7%
6	12	8.8%
7	3	2.2%
8	11	8.0%
9	2	1.5%
10	1	0.7%
11	2	1.5%
12	3	2.2%
Total	137	100

APPENDIX TABLE C5

Distribution of Medicaid Start Day in Halfway House among Study 1 "Medicaid Access" (Treatment) Group

Day in HWH	Frequency	Percent
First day or before	37	27.0%
2-15	16	11.7%
16-29	16	11.7%
30-44	6	4.4%
45-50	12	8.7%
60 or more	50	36.5%
Total	137	100

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APPENDIX TABLE C6

Number of Months with Medicaid in the Halfway House among Study 2 "Medicaid Access" (Treatment) Group

Number of Months	Frequency	Percent
1	10	4.9%
2	41	20.1%
3	36	17.7%
4	21	10.3%
5	24	11.8%
6	15	7.4%
7	19	9.3%
8	8	3.9%
9	11	5.4%
10	4	2.0%
11	5	2.5%
12	10	4.9%
Total	204	100

APPENDIX TABLE C7

Distribution of Medicaid Start Day in Halfway House among Study 2 "Medicaid Access" (Treatment) Group

Day in HWH	Frequency	Percent
First day or before	169	82.8%
2-15	8	3.9%
16-29	9	4.4%
30-44	7	3.4%
45-50	1	0.5%
60 or more	10	4.9%
Total	204	100

APPENDIX TABLE C8

DOC Health Care Utilization After Halfway House Entry Among Study 1 and Study 2 "No Medicaid Access" (Comparison) Groups

	Study 1				Study 2			
Type of Utilization	**n**	**Mean**	**Min**	**Max**	**n**	**Mean**	**Min**	**Max**
Clinical encounters or consultations								
Any	111	0.28	0	1	410	0.25	0	1
Count	111	1.57	0	69	410	0.78	0	43
Monthly average	111	0.17	0	5.31	410	0.14	0	8.60
Days	31	78.26	7	208	104	76.05	1	272
Medication orders								
Any	111	0.24	0	1	410	0.20	0	1
Count	111	0.68	0	10	410	0.66	0	21
Monthly average	111	0.11	0	2	410	0.11	0	3.60
Days	27	100.48	12	257	84	76.02	1	215
Infirmary admissions								
Any	111	0.01	0	1	410	0.01	0	1
Count	111	0.02	0	2	410	0.01	0	2
Monthly average	111	0.001	0	0.14	410	0.002	0	0.40
Days	1	107.00	107	107	4	105.00	32	198
Medical hospitalizations								
Any	111	0.01	0	1	410	0.002	0	1
Count	111	0.01	0	1	410	0.002	0	1
Monthly average	111	0.00	0	0.20	410	0.00	0	0.20
Mental health hospitalizations								
Any	111	0.00	0	0	410	0.002	0	1
Count	111	0.00	0	0	410	0.002	0	1
Monthly average	111	0.00	0	0	410	0.00	0	0.07

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APPENDIX TABLE C9

Medicaid Health Care Utilization After Halfway House Entry Among Study 1 and Study 2 "Medicaid Access" (Treatment) Groups[a]

Type of Utilization	Study 1 (n=137) %	Study 2 (n=204) %
Outpatient Care		
Substance Use-Related Outpatient Psychotherapy	0.0	6.4
Other Substance Use-Related Visits	2.2	7.3
Mental Health-Related Outpatient Psychotherapy	9.5	16.7
Other Mental Health-Related Visits	3.6	14.7
Other Non-Substance Use/Mental Health Outpatient	16.8	32.8
Medication Prescriptions		
Methadone Clinic	0.0	2.0
Other (non-methadone) Substance Use Medication	0.7	4.4
ADHD Medication	8.0	19.1
Mood-Related Medication[b]	8.0	22.0
Other Prescriptions	42.3	53.4
Hospitalizations		
Substance Use-Related Inpatient Hospitalization	0.0	2.0
Substance Use-Related Partial Hospitalization	0.0	0.0
Mental Health-Related Inpatient Hospitalization	0.0	0.0
Other Hospitalizations	2.9	5.4
Other Care		
Dental	15.3	33.3
Home Health	0.0	1.0
Laboratory	0.0	0.0
Vision	13.9	19.6
Injury	6.6	12.3
Emergency Department	13.1	29.4
Ambulance Trips	5.8	7.3
Other Transportation Services	1.5	3.9
Other	7.3	1.5

Notes: [a] Among those enrolled in Medicaid. Medicaid enrollment was defined as greater than 1 day of enrollment.
[b] For anxiety (including OCD), depression (including bipolar), schizophrenia, and PTSD.

APPENDIX TABLE C10

Impact of Medicaid Access on Health Care Utilization, Study 1

	Any outpatient			Any medications		
	β (Std. Err.)	Odds Ratio		β (Std. Err.)	Odds Ratio	
Access to Medicaid	0.323	1.382		0.863	2.371	**
	(0.374)			(0.362)		
Any outpatient care while incarcerated	1.303	3.679	**			
	(0.449)					
Any medications while incarcerated				0.921	2.513	**
				(0.390)		
Medical score 3+	0.672	1.959		0.817	2.264	*
	(0.487)			(0.485)		
Mental health score 3+	1.608	4.994	**	1.995	7.356	**
	(0.693)			(0.744)		
Alcohol/drug score 3+	0.159	1.172		1.078	2.940	
	(0.646)			(0.704)		
Age at HWH entry	0.0382	1.039	*	0.0272	1.028	
	(0.020)			(0.019)		
Race/ethnicity						
Black	0.0574	1.059		0.176	1.192	
	(0.441)			(0.432)		
Hispanic	0.464	1.590		0.436	1.546	
	(0.518)			(0.513)		
Education						
HS diploma	0.0940	1.099		0.556	1.743	
	(0.409)			(0.410)		
Any college	-0.291	0.748		0.127	1.136	
	(0.666)			(0.614)		
Length of stay in halfway house (days)	0.00718	1.007	***	0.00444	1.004	**
	(0.002)			(0.002)		
Constant	-5.137			-5.254		
	(1.171)			(1.180)		
Observations	198			198		
R2	0.21			0.21		
AIC	213.6			219.7		
BIC	253.0			259.2		
ll	-94.78			-97.86		

Note: * p < 0.10; ** p < 0.05; *** p < 0.001

APPENDIX TABLE C11

Impact of Medicaid Access on Health Care Utilization, Study 2

	Any outpatient			Any inpatient			Any medications		
	β (Std. Err.)	Odds Ratio		β (Std. Err.)	Odds Ratio		β (Std. Err.)	Odds Ratio	
Access to Medicaid	0.517	1.676	**	1.094	2.987	*	0.777	2.175	**
	(0.232)			(0.614)			(0.248)		
Any outpatient care while incarcerated	0.851	2.342	**						
	(0.263)								
Any inpatient care while incarcerated				1.762					
				(1.210)					
Any medications while incarcerated							0.763	2.145	**
							(0.256)		
Medical score 3+	0.378	1.459		-0.0852	0.918		0.546	1.727	**
	(0.256)			(0.756)			(0.269)		
Mental health score 3+	0.972	2.643	**	0.270	1.310		1.253	3.501	***
	(0.325)			(0.902)			(0.339)		
Alcohol/drug score 3+	0.725	2.064	**	0.799	2.224		0.868	2.382	**
	(0.344)			(1.083)			(0.387)		
Age at HWH entry	0.0308	1.031	**	0.0314	1.032		0.0456	1.047	***
	(0.011)			(0.031)			(0.012)		
Race/ethnicity									
Black	-0.00498	0.995		0.301	1.351		-0.291	0.747	
	(0.250)			(0.764)			(0.272)		
Hispanic	-0.0681	0.934		0.398	1.489		-0.121	0.886	
	(0.283)			(0.831)			(0.303)		
Education									
HS diploma	-0.348	0.706		-0.137	0.872		0.0206	1.021	
	(0.231)			(0.684)			(0.253)		
Any college	0.177	1.193		0.498	1.645		-0.0522	0.949	
	(0.329)			(0.897)			(0.382)		
Length of stay in halfway house (days)	0.000109	1.000		0.00167	1.002		0.00194	1.002	*
	(0.001)			(0.002)			(0.001)		
Constant	-3.584			-6.723			-4.846		
	(0.614)			(1.780)			(0.690)		
Observations	537			537			537		
R2	0.10			0.07			0.17		
AIC	601.4			131.4			519.3		
BIC	652.8			182.8			570.7		
ll	-288.7			-53.69			-247.7		

Note: * p < 0.10; ** p < 0.05; *** p < 0.001

APPENDIX TABLE C12

Impact of Medicaid Access on 1-Year Likelihood of Reincarceration

	Any reincarceration			Reincarceration for new crime			Reincarceration for technical violation		
	β (Std. Err.)	Odds Ratio		β (Std. Err.)	Odds Ratio		β (Std. Err.)	Odds Ratio	
Access to Medicaid	0.585	1.794	*	0.999	2.715	**	0.178	1.195	
	(0.311)			(0.455)			(0.356)		
Male	1.921	6.831	**	1.929	6.884		2.560	12.93	**
	(0.874)			(1.248)			(1.151)		
Race/ethnicity									
Black	-0.668	0.513	*	0.619	1.857		-1.326	0.266	**
	(0.377)			(0.536)			(0.444)		
Hispanic	-0.386	0.680		0.145	1.156		-0.832	0.435	*
	(0.422)			(0.651)			(0.479)		
Education									
HS diploma	-0.313	0.731		-0.614	0.541		-0.415	0.660	
	(0.336)			(0.496)			(0.387)		
Any college	-0.119	0.888		-0.103	1.108		-0.654	0.520	
	(0.477)			(0.685)			(0.582)		
Any emergency contact	-1.066	0.344		-1.387	0.250	*	0.384	1.468	
	(0.691)			(0.801)			(0.972)		
Age at HWH entry	-0.039	0.962		-0.003	0.997		-0.059	0.943	*
	(0.026)			(0.036)			(0.033)		
Age at first incarceration	-0.033	0.968		-0.049	0.952		-0.015	0.985	
	(0.034)			(0.047)			(0.043)		
Number of prior incarcerations	0.133	1.142	**	0.029	1.029		0.190	1.209	**
	(0.051)			(0.069)			(0.061)		
Alcohol/drug score 3+	0.445	1.560		-0.166	0.847		0.277	1.319	
	(0.613)			(0.732)			(0.711)		
Mental health score 3+	0.288	1.334		0.806	2.239		0.405	1.499	
	(0.536)			(0.716)			(0.605)		
Medical score 3+	-0.926	0.396	*	-0.738	0.478		-1.483	0.227	**

	Any reincarceration			Reincarceration for new crime			Reincarceration for technical violation		
	β (Std. Err.)	Odds Ratio		β (Std. Err.)	Odds Ratio		β (Std. Err.)	Odds Ratio	
	(0.480)			(0.668)			(0.644)		
Length of stay in prison (days)	-0.000230	1.000		-0.00151	0.998	**	0.0000790	1.000	
	(0.000)			(0.001)			(0.000)		
Most serious current offense									
Property	1.140	3.126	**	0.483	1.620		1.318	3.735	**
	(0.412)			(0.540)			(0.499)		
Drug	0.021	1.021		-2.369	0.094	**	0.891	2.437	
	(0.507)			(1.135)			(0.582)		
Public order	1.541	4.671	**	1.024	2.784		1.401	4.058	
	(0.701)			(0.942)			(0.863)		
Other	-0.113	0.893		-0.352	0.704		0.182	1.119	
	(0.742)			(0.927)			(0.903)		
Parole district D	-0.322	0.724		-0.329	0.719		-0.329	0.720	
	(0.326)			(0.489)			(0.364)		
Proportion of follow-up living in HWH	0.480	0.619		-1.723	0.179	**	0.149	1.161	
	(0.485)			(0.644)			(0.587)		
Constant	-0.712			0.015			-3.291		
	(1.591)			(2.152)			(2.048)		
Observations	380			380			380		
Pseudo R2	0.158			0.215			0.178		
AIC	345.2			198.9			288.3		
BIC	428.0			281.6			371.0		
ll	-151.6			-78.43			-123.1		

Note: * p < 0.10; ** p < 0.05; *** p < 0.001