# DANY NYC HJN Recidivism Evaluation Study Mid-Evaluation Report November 3, 2023

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## **EXECUTIVE SUMMARY**

The New York City Health Justice Network (NYC HJN), an innovative health service delivery program for individuals returning from incarceration, was developed and is currently being implemented by the NYC Department of Health and Mental Hygiene (DOHMH) with funding from the Manhattan District Attorney's Office (DANY) Criminal Justice Investment Initiative (CJII). NYC HJN seeks to provide individuals recently released from incarceration with peer support from community health workers (CHW) with lived experience of successful reentry from the criminal legal system, access to integrated primary care and social services. As an inter-sectoral strategy to improve community health and well-being, NYC HJN aims to reduce the likelihood of contact with the criminal legal system. NYC HJN addresses a wide range of participant health needs including support with health insurance, primary care, dental care, mental and behavioral health, and social service needs including assistance with employment, housing, food security, obtaining vital documents, and legal support. CHWs, employed as case workers in the NYC HJN health service delivery program, provide social emotional support and serve as critical advocates who help clients navigate the healthcare system and wide range of social service organizations often needed during the period of re-entry to the community after incarceration. The program serves people released from both prison and jail.

This mid-evaluation report provides a summary of the NYC HJN program implementation to date, including characteristics of participants and their engagement in the program. Key findings to date show that NYC HJN serves populations released from both jail and prison incarceration who are predominantly Black or Latino/a and who experience substantial health, social and economic vulnerability, indicated by high levels of healthcare service needs, unemployment, and unstable housing. Those served generally represents the New York City population with a history of incarceration. At enrollment, more than 20% of clients report they have "fair" or "poor" health versus "good" health or better. In addition, one-third of participants have children 18 years or younger, suggesting successful reentry of individuals released from incarceration has far-reaching implications for the family and community. Overall, program participants show a high level of participation in the program and engagement with CHWs, demonstrating the perceived benefit of holistic reentry programs such as NYC HJN organized around key community resources and embedded community health workers.

Key recommendations from this preliminary report include the need to reinforce and strengthen municipal health departments that link healthcare and social services for individuals released from incarceration, including primary care, housing, employment, vocational training, and other services. To achieve this, more resources are needed to develop a cadre of CHWs with lived experience of the criminal legal system to support such citywide public health interventions. In addition, there is a need to better understand and tailor programs to different individuals based on age, gender, race/ethnicity, and healthcare or mental health needs at the point of entry, suggesting that structural competence and the ability to identify and triage diverse health needs are critical features that should be embedded in reentry programs.

By simultaneously addressing health and social needs, NYC HJN and public health programs like it can play a critical role in supporting successful community re-integration of people with prior criminal legal system involvement.

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#### 1. BACKGROUND

In 2019, over 20,000 people were released from state and federal prisons in New York State (NYS), of whom approximately 2,000 people were released from federal prisons. In addition, at least 3,500 people were released from New York City (NYC) jails following sentence completion, though this is likely an underestimation due to some individuals not being publicly reported after completing a sentence that was less than one year in duration. In Carceration and reentry into the community are stressful life events. Incarcerated individuals experience significant stress during incarceration due to loss of freedom, isolation, and stigma associated with incarceration. During reentry, those who are released from jail or prison must negotiate the administrative burdens of housing and employment, re-establish family ties, and avoid return to high-risk situations. In addition, there are significant health needs during reentry, including the lack of access to primary healthcare, obtaining medications, and mental and behavioral healthcare. Individuals released from incarceration experience higher utilization of emergency services and higher rates of preventable hospital admissions.

The stress-buffering effect of social ties on well-being is well established and is thought to play an important role in protecting against adverse outcomes during the reentry process<sup>9-12</sup> and subsequent criminal legal system re-involvement. Social support buffers the stress associated with incarceration and reentry by enabling the justice-involved individual to better cope, thereby working through negative emotional and behavioral responses. In addition, members of an individual's social support network can provide instrumental support (e.g., assistance with obtaining a cell phone or insurance) and emotional support (e.g., being available to talk about life challenges), which is critical during reentry given incarceration disrupts community ties, employment and housing. There is evidence that social support has positive effects on the well-being, employment, and health of those released from incarceration.

#### 2. PROGRAM DESIGN

With these principles in mind, the NYC HJN was designed through a trauma-informed lens and uses community health workers (CHWs) with lived experience of prior incarceration to improve social support during the reentry process and address the needs of individuals (i.e., clients) recently released from incarceration. The use of peer CHWs with a history of successful reentry from the criminal legal system ensures that the case workers supporting NYC HJN clients are knowledgeable about their unique needs and challenges. CHWs provide social support in several ways including: (a) emotional support by discussing with clients their post-release goals and pathways to achieving goals; and (b) instrumental support by providing linkages to health and social services such as primary, dental and mental health care, employment, housing, food assistance and acquiring vital documents. In essence, CHWs serve as informal counselors, health educators, case workers and navigators for clients, creating a linkage vehicle for clients to connect with critical services and the community at-large upon reentry.

Individuals 18 years or older, residing in NYC, and released from incarceration within 3 years prior to enrollment were eligible to participate. The program started enrolling participants in September 2019. A total of 1,095 participants had been enrolled in the NYC HJN program up to

May 2023. Outreach to clients was conducted by the NYC HJN program via halfway houses, transitional hotels, shelters, various partner community-based organizations serving this population as well as other community-based organizations. Prospective clients were informed of the nature of the NYC HJN program and invited to voluntarily participate in the program. Clients provided informed consent for participation in the program, and those enrolled were additionally invited to participate in the recidivism evaluation study. Participation in the program was not contingent upon participation in the evaluation study; hence, NYC HJN participants who agreed to participate in the recidivism study signed a separate informed consent form specific to this evaluation.

Upon consent into program participation, clients were assigned a CHW and contacted for the initial intake assessment – which could take up to a month. The intake assessment provided much of the baseline data used in this report to describe client characteristics and baseline needs. Following the intake assessment, clients worked with their assigned CHW to address their needs. Key programmatic aims were to assist with linkage to primary care, behavioral healthcare and key social service needs such as housing and employment. While the original protocol aimed to retain participants for six months, the NYC HJN program was tailored to each client's specific needs, which meant the duration and extent of program engagement could vary among clients, with some clients engaged for a short duration in order to meet a discrete, one-time need (e.g., obtaining a birth certificate). A novel element of the program was this flexibility and client-centered approach.

While clients remained in the program, CHWs connected and referred clients to social and healthcare services, as needed. In many instances, CHWs accompanied clients to these appointments. In addition, CHWs aimed to help clients establish goals and make progress towards these goals. CHWs generally made at least one contact per week with each client. Typically, clients would exit the program once all their needs were met (in most cases within 6 months of program initiation). Exiting the program was established in two ways: 1) clients expressly indicating that they had no further needs; 2) clients were unresponsive after 4 outreach attempts, in which case program staff and CHWs would examine client records to see if previously indicated needs were met and then decide to close the case. On a case-by-case basis, if the CHW and participant had had a good rapport, the program team would make a judgment call to leave a case open longer than the 4-week standard for non-engagement, in order to leave open the possibility of re-engagement following program disruption (e.g., phone being cut off, re-arrest, relapse, etc.). Similarly, if they received information from a family member or other contact sooner than 4 weeks that indicated a reason for case closure, the CHW would consult with program leadership about closing the case early.

## 3. OVERALL EVALUATION APPROACH

The primary goals of the recidivism evaluation study are to (1) investigate the association between NYC HJN program participation and risk of recidivism (i.e., re-arrests, re-conviction, reincarceration) at 6- and 12-months post-enrollment, and (2) examine whether this association varies by program factors such as CHW engagement, service linkage, participant needs or demographics. Given that evidence suggests CHW models improve linkage to care during

reentry after incarceration,<sup>15-17</sup> and social support and healthcare protect against recidivism,<sup>22-24</sup> we hypothesize that NYC HJN will better address the social and healthcare needs of clients, which, in turn, will reduce the likelihood of subsequent criminal legal system involvement. See the Appendix 8.1 for the program logic model.

The NYU-CUNY PRC ("PRC") is collaborating with the Manhattan District Attorney's Office (DANY), with guidance from the NYC Department of Health and Mental Hygiene (DOHMH), to compare NYC HJN clients to a matched comparison group of individuals released from incarceration (jail or prison) in NYS who have not participated in the NYC HJN on post-incarceration recidivism. Matching will take into account participant demographics, time frame of release from incarceration, and similarity of prior history in criminal legal system involvement. In the final evaluation report, we will link NYC HJN program data to data from the NYC Department of Corrections (DOC) and the NYS Department of Corrections and Community Supervision (DOCCS) to compare NYC HJN participants with a matched comparison group of individuals released from incarceration who are unexposed to NYC HJN. Using NYS Division of Criminal Justice Services (DCJS) data, we will investigate the association of NYC HJN participation (vs. the matched comparison) with criminal legal system re-involvement outcomes, specifically arrests, case disposition (e.g., dismissed, declined to process, plea), conviction and re-incarceration.

This mid-evaluation report focuses on a description of NYC HJN participants' initial engagement in the program as the matched analysis is being conducted at the time of this report. The final evaluation report, expected in 2024, will examine the program participants relative to the comparison group on the outcomes described above.

## 4. MIDTERM EVALUATION METHODS

NYC HJN participants were invited to participate in the recidivism evaluation from April 2021 through October 2022. Our initial analysis, shown in this report, aims to characterize NYC HJN program participants based on their demographics, self-reported health, and needs at intake. Demographic variables include age, gender, race/ethnicity, language spoken, education, employment status, having children <18 years of age, and housing status. Race/ethnicity was categorized as Black, Latino/a, white and Other. Due to small sample sizes, American Indian, Alaska Native and Native Hawaiian, Asian and Pacific Islander, and Middle Eastern categories were grouped into a single "Other" category. Needs assessed include both health- and nonhealth-related needs. Non-health related needs included housing, food, employment, family, legal, telephone, transportation, obtaining vital documents, and other services.

In this report, we also examine the "dose" of program participation among NYC HJN clients who consented to the recidivism evaluation study. Program dose was defined by the number of contacts between the CHW and client (frequency of contact) and the total number of days between a client's intake assessment and the last contact with a CHW (duration of contact). Data analysis consisted of standard descriptive statistics, including calculating percentages for

<sup>&</sup>lt;sup>a</sup> Includes only participants who consented to being in the NYC HJN recidivism evaluation study

categorical variables (e.g., gender) and means (i.e., averages) and standard deviations for continuous variables (e.g., age). Furthermore, we compared demographics, needs at intake, and program dose between program participants released from jail vs. prison, and those who enrolled in the program within 3 months of release vs. later than 3 months post-release.

#### 5. RESULTS

In total, 286 clients consented to the recidivism evaluation. A majority of clients learned about NYC HJN through a correctional institution (41.9%), a community-based organization (30.2%) or a healthcare facility (7.3%), while other sources of referral included friends and other community contacts.

#### 5.1 Client characteristics.

The average age of clients was 45.1 years (SD=12.7, range=20-78), with approximately half 50 years or younger and one-third of clients categorized in the 36-50-year-old age category (34.8%). Most were male (92.7%); Black (52.1%) or Latino/a (27.3%), which mirror the incarcerated population in NYS, where approximately three-quarters are Black or Latino/a.¹ The majority spoke English (94.2%) and nearly one in five spoke Spanish (16.8%). The majority had a high school education or greater (70.7%). Most clients were unemployed at the time of intake (80.3%) and 15.3% were employed either full-time (10.9%) or part-time (4.4%). Approximately one-third of clients had children younger than 18 years old (35.4%). At the time of intake, a small minority owned their own home (2.8%); clients primarily stayed with family (18.5%), at transitional homes (17.1%), halfway houses (15.7%), hotels (11.5%), shelters (10.1%) or they reported having multiple housing arrangements (14.3%). (Table 1).

Table 1. Client characteristics.

	n	%
Age group		
18-25	14	5.2
26-35	62	23.0
36-50	93	34.8
51-61	73	27.0
62-72	20	7.4
73+	7	2.6
Age (Mean, SD)	45.13	12.73
Gender		
Female	17	6.5
Male	243	92.7
Other	2	0.8
Race/ethnicity		
Black	149	52.1
Hispanic or Latino/a	78	27.3
White	22	7.7
Other	37	12.9
Language spoken (multiple languages possible)		
English	258	94.2
Spanish	46	16.8
Education		
Less than high school	4	1.5
Some high school	74	27.0
High school (HS) diploma, GED, or HS equivalency	108	39.4

Some college or vocational school	42	15.3
Vocational degree or certification	11	4.0
Associate degree	13	4.7
College degree	16	5.8
Post-graduate degree	4	1.5
Other	2	0.7
Current employment		
Employed full-time	30	10.9
Employed part-time	12	4.4
Unable to work/disabled	12	4.4
Unemployed	220	80.3
Client has children 18 years old or younger		
No	177	64.6
Yes	97	35.4
Housing status		
Shelter	29	10.1
Single Room Occupancy	4	1.4
NYCHA	1	0.3
Over house on an anti-	0	2.8
Own home or apartment	8	2.0
Living with a family member or a friend's home	8 53	18.5
•	_	
Living with a family member or a friend's home	53	18.5
Living with a family member or a friend's home Transitional housing	53 49	18.5 17.1
Living with a family member or a friend's home Transitional housing Residential drug treatment facility	53 49 5	18.5 17.1 1.7
Living with a family member or a friend's home Transitional housing Residential drug treatment facility Halfway house	53 49 5 45	18.5 17.1 1.7 15.7

Note. Missing data rates (excluded from table): age n=17, 5.9%, gender n=24, 8.4%, education n=12, 4.2%, current employment n=12, 4.2%, client has children 18 years old or younger n=12, 4.2%, language spoken n=12, 4.2%.

# 5.2 Most recent release from jail vs. prison and time since release at program enrollment.

The majority of clients (82.5%) were most recently released from state or federal prisons, while 17.5% were most recently released from NYC jails (Figure 1). Most NYC HJN clients were enrolled in the NYC HJN program within 3 months (66.1%) or 4-6 months (13.1%) after release (Figure 2). These findings indicate clients that can be identified during the first six months after incarceration, a period of heightened vulnerability when social and health risks are highest and where social support is impactful in mitigating risks during re-entry.<sup>25</sup>

Most recent release from

17.5%

Jail
Prison

82.5%

Figure 1. Most recent release from jail vs. prison at the time of NYC HJN program enrollment.

Note. Data based on n=274: clients released from jail n=48 or prison n=226. Missing data (excluded from charts): most recent release source n=12, 4.2%.

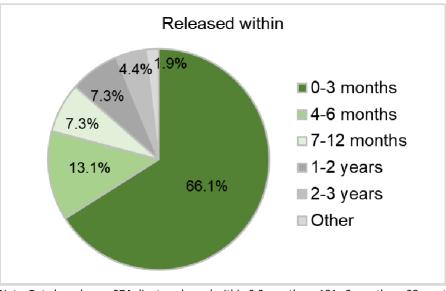


Figure 2. Time since release at the time of NYC HJN program enrollment.

Note. Data based on n=274 clients: released within 0-3 months n=181 >3 months n=88, or at "other" time n=5. "Other" includes released less than 12 months ago (undefined) n=1, 0.4% and less than 3 years ago (undefined) n=4, 1.5%. Missing data (excluded from charts): release within n=12, 4.2%.

## 5.3 Self-reported health status at program enrollment.

While the majority of clients reported good health or better at the time of intake (78.8%), more than one-fifth reported poor or fair health (21.2%), indicating a significant need in this population for healthcare (Figure 3). There is some evidence that people with chronic health conditions may overestimate their health status, so the high rate of participants reporting good

health or better may not mean that this group does not have health needs.<sup>26</sup> There were no differences in self-reported health by client demographics (i.e., age, gender, race/ethnicity, language spoken, education, employment, housing, having children <18 years; data not shown).

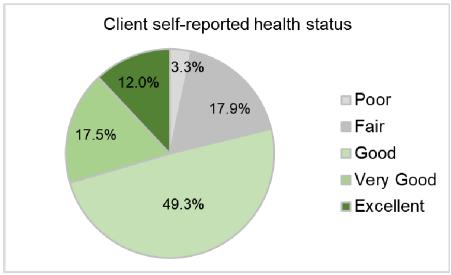


Figure 3. Self-reported health status.

Note. Data based on n=274 clients who self-reported their health status as poor n=9, fair n=49, good n=135, very good n=48 or excellent n=33. Missing data (excluded from chart): n=12, 4.2%.

# 5.4 Client characteristics and self-reported health by release from jail vs. prison and time since release at program enrollment.

Clients released from prison were on average older than clients released from jail (M=46.1 years, SD=13.0 vs. M=40.5 years, SD=10.8, p<.01) and more likely to be male (94.4% vs. 84.4%, p<.05). There were no other statistically significant differences between clients released from jail vs. prison in demographic characteristics or self-reported health (Table 2). Though not statistically significant at the p<.05 level due to the modest sample size, there was evidence that those released from jail were less likely than those released from prison to be unemployed (68.8% versus 82.7%, respectively) and more likely to have children 18 years or younger (47.9% versus 32.7%, respectively).

Table 2. Client characteristics by released from jail vs. prison.

	Rele	Released from jail		ased		
	fror			prison		
	n=	=48	n=	226		
	n	%	n	%		
Age group						
18-25	5	10.6	9	4.1		
26-35	14	29.8	48	21.8		
36-50	16	34.0	75	34.1		
51-61	12	25.5	61	27.7		
62-72	0	0	20	9.1		
73+	0	0 0		0 0 7		3.2
Age (Mean, SD)	40.49	10.76	46.12	12.78		

Gender				
Male	38	84.4	204	94.4
Female	6	13.3	11	5.1
Other	1	2.2	1	0.5
Race/ethnicity				
Black	26	54.2	123	54.4
Hispanic or Latino/a	15	31.3	63	27.9
White	3	6.3	19	8.4
Other	4	8.3	21	9.3
Education				
Less than high school	0	0.0	4	1.8
Some high school	15	31.3	59	26.1
High school diploma, GED, or High school	15	21 2	03	<i>1</i> 1 2
equivalency				
Some college or vocational school	9	18.8	33	14.6
Vocational degree or certification	5	10.4	6	2.7
Associates degree	3	6.3	10	4.4
College degree	1	2.1	15	6.6
Post-graduate degree	0	0	4	1.8
Other	0	0	2	0.9
Current employment				
Employed full-time	9	18.8	21	9.3
Employed part-time	3	6.3	9	4.0
Unable to work/disabled	3	6.3	8	4.0
Unemployed	33	68.8	187	82.7
Client has children 18 years old or younger				
No	25	52.1	152	67.3
Yes	23	47.9	74	32.7
Client's self-reported health				
Excellent	6	12.5	27	11.9
Very Good	13	27.1	35	15.5
Good	18	37.5	117	51.8
Fair	9	18.8	40	17.7
Poor	2	4.2	7	3.1

Note. Bolded statistics indicate statistically significant differences (p<.05) between clients released from jail vs. prison. Sample sizes may be different for each subgroup analysis due to missing data.

Clients who enrolled in the NYC HJN program within 3 months of release, compared to those who enrolled more than 3 months after release, were more likely to be male (95.4% vs. 87.8%, p<.05) and unemployed (86.7% vs. 67%, p<.05). There were no other statistically significant differences between clients who enrolled in the NYC HJN program with 3 months of release vs. those enrolled more than 3 months after release. (Table 3).

Table 3. Client characteristics by time since release at the NYC HJN program enrollment.

	0-3 m	ased onths 181	>3 m	eased nonths =88	
	n	%	n	%	
Age group					
18-25	6	3.4	8	9.6	
26-35	43	24.0	17	20.5	
36-50	62	34.6	28	33.7	
51-61	49	27.4	23	27.7	
62-72	15	8.4	5	6.0	

73+	4	2.2	2	2.4
Age (Mean, SD)	45.39	12.52	44.37	13.04
Gender				
Male	166	95.4	72	87.8
Female	7	4.0	9	11.0
Other	1	0.6	1	1.2
Race				
Black	95	52.5	53	60.2
Hispanic or Latino/a	53	29.3	24	27.3
White	18	9.9	3	3.4
Other	15	8.3	8	9.1
Education				
Less than high school	3	1.7	1	1.1
Some high school	43	23.8	29	33.0
High school diploma, GED, or High school equivalency	81	44.8	27	30.7
Some college or vocational school	31	17.1	10	11.4
Vocational degree or certification	4	2.2	7	8.0
Associates degree	3	1.7	9	10.2
College degree	11	6.1	4	4.5
Post-graduate degree	3	1.7	1	1.1
Other	2	1.1	0	0
Current employment				
Employed full-time	17	9.4	13	14.8
Employed part-time	1	0.6	10	11.4
Unable to work/disabled	6	3.3	6	6.8
Unemployed	157	86.7	59	67.0
Client has children 18 years old or younger				
No	119	65.7	55	62.5
Yes	62	34.3	33	37.5
Client's self-reported health				
Excellent	23	12.7	10	11.4
Very Good	37	20.4	10	11.4
Good	84	46.4	50	56.8
Fair	33	18.2	13	14.8
Poor	4	2.2	5	5.7

Note. Bolded statistics indicate statistically significant differences (p<.05) between clients who enrolled in the NYC HJN program within 0-3 months vs. more than 3 months of release. Sample sizes may be different for each subgroup analysis due to missing data.

#### 5.5 Client needs and service referrals.

Upon program enrollment and throughout program engagement, program staff assessed participants' health- and non-health-related needs. Clients could report multiple needs. Based on these assessed needs, CHWs made referrals for clients. The most frequently reported needs that clients identified were primary care services (52.1%), employment services (48.6%), help obtaining vital documents such as a social security card (45.1%), peer support (36.7%), housing support (27.6%), vocational training (25.2%), supplemental nutrition assistance (19.6%), career development (18.9%), dental care (16.8%), emergency housing (14.3%), transportation (14.3%), health insurance (14.3%), health promotion education (12.6%), mental health services (11.9%), career education support (11.2%) and phone assistance (10.1%). (Table 4)

Table 4. Client needs.b

	Self-iden	tified needs
	(N <sub>clie</sub>	<sub>nts</sub> =286)
Service	n	%
Health-related		
Primary care	149	52.1
Specialty health services	10	3.5
Dental care	48	16.8
Prenatal care services	2	0.7
Mental health services or emotional support	34	11.9
Substance use treatment	20	7.0
Health promotion/education	36	12.6
Other healthcare services	15	5.2
Harm reduction services	12	4.2
Health insurance	41	14.3
Housing		
Emergency housing	41	14.3
Housing support services	79	27.6
Food		
Emergency food	13	4.5
Supplemental Nutrition Assistance Program (SNAP/WIC)	56	19.6
Employment/income/job training		
Employment services	139	48.6
Supplemental security income (SSI)	6	2.1
Social security disability (SSD)	6	2.1
Career education support	32	11.2
Career development services	54	18.9
Vocational training	72	25.2
Family		
Family (reunification or support) services	16	5.6
Family/social connectedness services	0	0.0
Legal	<del>-</del>	
Legal services	21	7.3
Obtain vital documents	129	45.1
Phone/transportation		
Phone assistance	29	10.1
Transportation assistance (i.e., MetroCards)	41	14.3
Other		
Other services	6	2.1
Other emergency services	5	1.7
LGBTQIA support services	1	0.3
Peer support	105	36.7

Referrals for services were made for 260 of the 286 (90.9%) clients. The mean number of referrals made per client was 5.25 (SD=5.67, range=1-40, total number of referrals for all clients n=1,504). The most frequent referrals regarding healthcare were primary care (8.7%), mental health services (3.7%), supplemental nutrition (3 %), health promotion education (2.7%), dental

<sup>&</sup>lt;sup>b</sup> The administration of the needs checklist changed throughout the course of HJN implementation; thus, needs data should be interpreted with a number of limitations, described on page 25.

care (2.3%), and obtaining health insurance (2.2%). In terms of non-health-related services, the most common non-healthcare referrals were employment services (17.3%), obtaining vital documents (9.9%), career development (7.3%), housing support services (6.9%), vocational training (6%), legal services (2.6%), and phone assistance (2 %). In addition, 14.5% of all referrals were made for other services (details not available and detailed data redacted). (Table 5)

Table 5. Service referrals.

Service Health-related		errals <sub>s</sub> =1,504) % of all referrals
Service		% of all
	n	referrals
Health-related		161611912
Primary care	131	8.7
Specialty health services	11	0.7
Dental care	35	2.3
Prenatal care services	0	0.0
Mental health services or emotional support	56	3.7
Substance use treatment	14	0.9
Health promotion/education	40	2.7
Other healthcare services	26	1.7
Harm reduction services	14	0.9
Health insurance	33	2.2
Housing		
Emergency housing	8	0.5
Housing support services	104	6.9
Food		
Emergency food	4	0.3
Supplemental Nutrition Assistance Program (SNAP/WIC)	45	3.0
Employment/income/job training		
Employment services	260	17.3
Supplemental security income (SSI)	3	0.2
Social security disability (SSD)	4	0.3
Career education support	29	1.9
Career development services	110	7.3
Vocational training	90	6.0
Family		
Family (reunification or support) services	22	1.5
Family/social connectedness services	8	0.5
Legal		
Legal services	39	2.6
Obtain vital documents	149	9.9
Phone/transportation		
Phone assistance	30	2.0
Transportation assistance (i.e., MetroCards)	17	1.1
Other		
Other services	219	14.6
Other emergency services	3	0.2
LGBTQIA support services	0	0.0
Peer support		
Accompaniment to appointments		

For the number of clients referred to the different services above, please see Table 1S in Appendix 8.2.

# 5.6 Client needs by demographic characteristics.

Tables 6-8 show the range of client needs based on client demographics. Statistically significant differences (p<.05; bolded) should be interpreted with caution given the modest sample sizes when broken down by demographic subgroups. Likewise, there is evidence based on the point estimates of additional differences that were not statistically significant at the 0.05 level; these trends should be noted and reviewed in future research.

There were statistically significant differences (p<.05) in needs by age (Table 6). Of note, housing support tended to be a more common need among persons older than age 35 years (approximately 30% or greater depending on age group) versus persons 35 years or younger (approximately 20% or less). The need for employment assistance was more commonly reported by those aged between 26 to 50 years (over 50%) versus those younger and older (less than 50%). Of those aged 36 to 50 years, 12.9% requested family unification services, while this need was indicated in 4% or less among other age groups.

Table 6. Client needs by age.c

					Age G	iroup				
	18	-25 y	26-	35 y	36-	·50 y	51-	61 y	6	2+ y
	(n:	=14)	(n=	-62)	(n=	=93)	(n=	=73)	(n	=27)
Service	n	%	n	%	n	%	n	%	n	%
Health-related										
Primary care	7	50	33	53.2	48	51.6	37	50.7	16	59.3
Specialty health services	1	7.1	1	1.6	3	3.2	3	4.1	1	3.7
Dental care	2	14.3	13	21.0	18	19.4	8	11.0	5	18.5
Mental health services or emotional support	0	0	9	14.5	9	9.7	12	16.4	2	7.4
Substance use treatment	0	0	6	9.7	9	9.7	4	5.5	0	0
Health promotion/education	1	7.1	6	9.7	16	17.2	7	9.6	1	3.7
Other healthcare services	0	0	2	3.2	2	2.2	7	9.6	4	14.8
Harm reduction services	0	0	3	4.8	4	4.3	3	4.1	1	3.7
Health insurance	3	21.4	12	19.4	11	11.8	7	9.6	6	22.2
Non-health related										
Housing										
Emergency housing	3	21.4	6	9.7	13	14.0	14	19.2	3	11.1
Housing support services	3	21.4	10	16.1	28	30.1	29	39.7	8	29.6
Food										
Emergency food	0	0	2	3.2	5	5.4	4	5.5	0	0
Supplemental Nutrition Assistance Program (SNAP/WIC)	2	14.3	14	22.6	20	21.5	10	13.7	7	25.9
Employment/income/job training										
Employment services	6	42.9	35	56.5	51	54.8	36	49.3	4	14.8
Supplemental security income (SSI)	0	0	0	0	3	3.2	1	1.4	2	7.4
Social security disability (SSD)	0	0	1	1.6	2	2.2	2	2.7	0	0
Career education support	2	14.3	8	12.9	12	12.9	5	6.8	2	7.4
Career development services	2	14.3	13	21.0	21	22.6	15	20.5	0	0
Vocational training	3	21.4	18	29.0	30	32.3	17	23.3	1	3.7
Family										

<sup>&</sup>lt;sup>c</sup> The administration of the needs checklist changed throughout the course of HJN implementation; thus, needs data should be interpreted with a number of limitations, described on page 25.

Family (reunification or support) services	0	0	2	3.2	12	12.9	1	1.4	1	3.7
Legal										
Legal services	0	0	2	3.2	9	9.7	4	5.5	5	18.5
Obtain vital documents	7	50	21	33.9	39	41.9	41	56.2	11	40.7
Phone/transportation										
Phone assistance	2	14.3	4	6.5	9	9.7	8	11.0	3	11.1
Transportation assistance (i.e., MetroCards)	1	7.1	5	8.1	17	18.3	11	15.1	6	22.2
Other										
Other services	1	7.1	0	0	2	2.2	0	0	0	0
Other Emergency services	0	0	0	0	2	2.2	2	2.7	0	0
Peer support	4	28.6	18	29.0	36	38.7	28	38.4	12	44.4
Accompaniment to appointments	1	7.1	1	1.6	0	0	0	0	2	7.4

Note. Bolded statistics indicate statistically significant differences (p<.05) between demographic groups.

There also were statistically significant differences (p<.05) observed by gender (Table 7). Females were significantly more likely than males to report emergency housing needs (41.2% versus 12.3% respectively) and family reunification support needs (23.5 versus 4.5%). On the other hand, females were less likely than males to report employment placement needs (29.3% versus 52.4%).

Table 7. Client needs by gender.d

		Gend	er	
	N	⁄lale	Fe	emale
	(n=	243)	1)	า=17)
Service	n	%	n	%
Health-related				
Primary care	125	51.4	7	41.2
Specialty health services	8	3.3	1	5.9
Dental care	43	17.7	1	5.9
Mental health services or emotional support	29	11.9	3	17.6
Substance use treatment	17	7.0	2	11.8
Health promotion/education	29	11.9	1	5.9
Other healthcare services	13	5.3	1	5.9
Harm reduction services	10	4.1	1	5.9
Health insurance	34	14.0	1	5.6
Non-health related				
Housing				
Emergency housing	30	12.3	7	41.2
Housing support services	69	28.4	6	35.3
Food				
Emergency food	7	2.9	2	11.8
Supplemental Nutrition Assistance Program (SNAP/WIC)	45	18.5	5	29.4
Employment/income/job training				
Employment services	127	52.3	5	29.4
Supplemental security income (SSI)	5	2.1	1	5.9
Social security disability (SSD)	3	1.2	1	5.9
Career education support	28	11.5	2	11.8
Career development services	48	19.8	3	17.6

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<sup>&</sup>lt;sup>c</sup> The administration of the needs checklist changed throughout the course of HJN implementation; thus, needs data should be interpreted with a number of limitations, described on page 25.

Vocational training	65	26.7	3	17.6
Family				
Family (reunification or support) services	11	4.5	4	23.5
Legal				
Legal services	18	7.4	1	5.9
Obtain vital documents	109	44.9	7	41.2
Phone/transportation				
Phone assistance	24	9.9	2	11.8
Transportation assistance (i.e., MetroCards)	38	15.6	1	5.9
Other				
Other services	3	1.2	0	0
Other Emergency services	4	1.6	0	0
Peer support	91	37.4	4	23.5
Accompaniment to appointments	3	1.2	1	5.9

Note. Bolded statistics indicate statistically significant differences (p<.05) between demographic groups.

Finally, statistically significant differences (p<.05) in needs by race/ethnicity were observed (Table 8). Employment service needs were more frequently indicated by Latino/as (59.0%) and Blacks release from incarceration (45.6%) compared to Whites (40.9%) (p<.05). Similar trends were observed for vocation training needs, where over a quarter of Latino/as and Blacks indicated this need while none of the White participants reported so. Last but not least, one notable point difference (though not statistically significant) was that while primary care needs were high and comparable across racial/ethnic groups (approximately half of each subgroup), mental health service needs were much more commonly reported among Whites (22.7%) relative to Blacks and Latino/a (approximately one in in ten). This warrants further research in larger samples to confirm.

Table 8. Client needs by race/ethnicity.e

	Race/Ethnicity							
	Black Latino/a (n=149) (n=78)		White (n=22)		Other (n=37)			
Service	n	%	n	%	n	%	n	%
Health-related	<del></del>							
Primary care	81	54.4	40	51.3	11	50	11	29.7
Specialty health services	3	2.0	3	3.8	2	9.1	1	2.7
Dental care	23	15.4	18	23.1	1	4.5	4	10.8
Mental health services or emotional support	16	10.7	9	11.5	5	22.7	2	5.4
Substance use treatment	10	6.7	5	6.4	2	9.1	2	5.4
Health promotion/education	18	12.1	9	11.5	0	0	4	10.8
Other healthcare services	6	4.0	6	7.7	2	9.1	1	2.7
Harm reduction services	5	3.4	3	3.8	1	4.5	2	5.4
Health insurance	22	14.8	14	17.9	1	4.5	2	5.4
Non-health related								
Housing								
Emergency housing	24	16.1	11	14.1	2	9.1	3	8.1
Housing support services	40	26.8	25	32.1	9	40.9	4	10.8

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<sup>&</sup>lt;sup>e</sup> The administration of the needs checklist changed throughout the course of HJN implementation; thus, needs data should be interpreted with a number of limitations, described on page 25.

7	4.7	4	5.1	0	0	0	0
31	20.8	16	20.5	2	9.1	5	13.5
68	45.6	46	59.0	9	40.9	11	29.7
3	2.0	2	2.6	0	0	1	2.7
2	1.3	3	3.8	0	0	0	0
20	13.4	7	9.0	1	4.5	2	5.4
31	20.8	13	16.7	1	4.5	7	18.9
39	26.2	22	28.2	0	0	8	21.6
7	4.7	6	7.7	2	9.1	1	2.7
11	7.4	5	6.4	1	4.5	3	8.1
68	45.6	31	39.7	11	50	13	35.1
18	12.1	7	9.0	0	0	2	5.4
22	14.8	15	19.2	1	4.5	2	5.4
0	0	0	0	0	0	0	0
1	0.7	2	2.6	0	0	1	2.7
53	35.6	32	41.0	4	18.2	11	29.7
2	1.3	1	1.3	1	4.5	0	0
	31 68 3 2 20 31 39 7 11 68 18 22 0 1 53	31 20.8  68 45.6 3 2.0 2 1.3 20 13.4 31 20.8 39 26.2  7 4.7  11 7.4 68 45.6  18 12.1 22 14.8  0 0 1 0.7 53 35.6	31     20.8     16       68     45.6     46       3     2.0     2       2     1.3     3       20     13.4     7       31     20.8     13       39     26.2     22       7     4.7     6       11     7.4     5       68     45.6     31       18     12.1     7       22     14.8     15       0     0     0       1     0.7     2       53     35.6     32	31         20.8         16         20.5           68         45.6         46         59.0           3         2.0         2         2.6           2         1.3         3         3.8           20         13.4         7         9.0           31         20.8         13         16.7           39         26.2         22         28.2           7         4.7         6         7.7           11         7.4         5         6.4           68         45.6         31         39.7           18         12.1         7         9.0           22         14.8         15         19.2           0         0         0         0           1         0.7         2         2.6           53         35.6         32         41.0	31         20.8         16         20.5         2           68         45.6         46         59.0         9           3         2.0         2         2.6         0           2         1.3         3         3.8         0           20         13.4         7         9.0         1           31         20.8         13         16.7         1           39         26.2         22         28.2         0           7         4.7         6         7.7         2           11         7.4         5         6.4         1           68         45.6         31         39.7         11           18         12.1         7         9.0         0           22         14.8         15         19.2         1           0         0         0         0         0           1         0.7         2         2.6         0           53         35.6         32         41.0         4	31         20.8         16         20.5         2         9.1           68         45.6         46         59.0         9         40.9           3         2.0         2         2.6         0         0           2         1.3         3         3.8         0         0           20         13.4         7         9.0         1         4.5           31         20.8         13         16.7         1         4.5           39         26.2         22         28.2         0         0           7         4.7         6         7.7         2         9.1           11         7.4         5         6.4         1         4.5           68         45.6         31         39.7         11         50           18         12.1         7         9.0         0         0           22         14.8         15         19.2         1         4.5           0         0         0         0         0         0           1         0.7         2         2.6         0         0           2         2.6         0         0 <td>31         20.8         16         20.5         2         9.1         5           68         45.6         46         59.0         9         40.9         11           3         2.0         2         2.6         0         0         1           2         1.3         3         3.8         0         0         0           20         13.4         7         9.0         1         4.5         2           31         20.8         13         16.7         1         4.5         7           39         26.2         22         28.2         0         0         8           7         4.7         6         7.7         2         9.1         1           11         7.4         5         6.4         1         4.5         3           68         45.6         31         39.7         11         50         13           18         12.1         7         9.0         0         0         2           22         14.8         15         19.2         1         4.5         2           0         0         0         0         0         0</td>	31         20.8         16         20.5         2         9.1         5           68         45.6         46         59.0         9         40.9         11           3         2.0         2         2.6         0         0         1           2         1.3         3         3.8         0         0         0           20         13.4         7         9.0         1         4.5         2           31         20.8         13         16.7         1         4.5         7           39         26.2         22         28.2         0         0         8           7         4.7         6         7.7         2         9.1         1           11         7.4         5         6.4         1         4.5         3           68         45.6         31         39.7         11         50         13           18         12.1         7         9.0         0         0         2           22         14.8         15         19.2         1         4.5         2           0         0         0         0         0         0

Note. Bolded statistics indicate statistically significant differences (p<.05) between demographic groups.

## 5.7 Client needs by release from jail vs. prison and by time since release.

Compared to clients released from prison, clients released from jail identified more need for mental health services or emotional support (22.9% vs. 10.2%, p<.05) and substance use treatment (14.6% vs. 5.7%, p<.05), obtaining vital documents (64.6% vs. 43.4%, p<.05), and phone assistance (18.8% vs. 8.8%, p<.05). Additionally, clients released from prison identified greater need for employment services when compared to their counterparts released from jail (54.0% vs. 35.4%, p<.05). (Table 9).

Table 9. Client needs based on release from jail vs. prison.

		ed from jail :48)	Released from prison (n=226)	
Service	n	%	n	%
Health-related				
Primary care	21	43.8	128	56.4
Specialty health services	1	2.1	9	4.0
Dental care	11	22.9	37	16.3
Prenatal care services	0	0.0	2	0.9
Mental health services or emotional support	11	22.9	23	10.2
Substance use treatment	7	14.6	13	5.7
Health promotion/education	1	2.1	35	15.4
Other healthcare services	4	8.3	11	4.8
Harm reduction services	3	6.3	9	4.0
Health insurance	4	8.3	37	16.3
Non-health related				
Housing				
Emergency housing	6	12.5	35	15.5
Housing support services	11	22.9	68	30.1
Food				
Emergency food	1	2.1	12	5.3

Supplemental Nutrition Assistance Program (SNAP/WIC)	7	14.6	49	21.7	
Employment/income/job training					
Employment services	17	35.4	122	54.0	
Supplemental security income (SSI)	1	2.1	5	2.2	
Social security disability (SSD)	1	2.1	5	2.2	
Career education support	5	10.4	27	11.9	
Career development services	10	20.8	44	19.5	
Vocational training	11	22.9	61	27.0	
Family					
Family (reunification or support) services	2	4.2	14	6.2	
Family/social connectedness services	0	0.0	0	0.0	
Legal					,
Legal services	2	4.2	19	8.4	
Obtain vital documents	31	64.6	98	43.4	
Phone/transportation					
Phone assistance	9	18.8	20	8.8	
Transportation assistance (i.e. MetroCard's)	3	6.3	38	16.8	
Other					
Other services	0	0.0	6	2.7	
Other Emergency services	1	2.1	4	1.8	
LGBTQIA support services	0	0.0	1	0.4	
Peer support	15	31.3	90	39.8	
Accompaniment to appointments	1	2.1	3	1.3	

Note. Bolded statistics indicate statistically significant differences (p<.05) between jail vs. prison clients.

In addition, compared to clients enrolled in the NYC HJN program more than 3 months after release, clients enrolled within 3 months after release identified more need for Supplemental Nutrition Assistance Program (SNAP/WIC) (26% vs. 9.1%, p<.05). Clients enrolled within the three months, however, indicated less need for emergency housing (11.6 % vs. 21.6%, p<.05), career education support (8.8% vs. 18.2%, p<.05), and obtaining vital documents (42.5% vs. 55.7%, p<.05) when compared to clients who enrolled in the NYC HJN program more than 3 months after release (Table 10).

Table 10. Client needs by time since release at NYC HJN program enrollment.

	Rele	eased	Rele	ased
	0-3 n	nonths	>3 m	onths
	(n=	181)	(n=	:88)
Service	n	%	n	%
Health-related				
Primary care	106	58.6	42	47.7
Specialty health services	8	4.4	2	2.3
Dental care	29	16.0	18	20.5
Prenatal care services	2	1.1	0	0.0
Mental health services or emotional support	20	11.0	13	14.8
Substance use treatment	11	6.1	9	10.2
Health promotion/education	24	13.3	11	12.5
Other healthcare services	9	5.0	5	5.7
Harm reduction services	8	4.4	4	4.5
Health insurance	32	17.7	9	10.2
Non-health related				
Housing				
Emergency housing	21	11.6	19	21.6
Housing support services	49	27.1	29	33.0

Food				
Emergency food	9	5.0	4	4.5
Supplemental Nutrition Assistance Program	47	26.0	8	9.1
(SNAP/WIC)			_	
Employment/income/job training				
Employment services	94	51.9	44	50.0
Supplemental security income (SSI)	5	2.8	1	1.1
Social security disability (SSD)	3	1.7	3	3.4
Career education support	16	8.8	16	18.2
Career development services	31	17.1	22	25.0
Vocational training	46	25.4	26	29.5
Family				
Family (reunification or support) services	9	5.0	6	6.8
Family/social connectedness services	0	0.0	0	0.0
Legal				
Legal services	13	7.2	8	9.1
Obtain vital documents	77	42.5	49	55.7
Phone/transportation				
Phone assistance	18	9.9	11	12.5
Transportation assistance (i.e. MetroCard's)	29	16.0	12	13.6
Other				
Other services	5	2.8	1	1.1
Other Emergency services	3	1.7	2	2.3
LGBTQIA support services	1	0.6	0	0.0
Peer support	67	37.0	37	42.0
Accompaniment to appointments	2	1.1	2	2.3

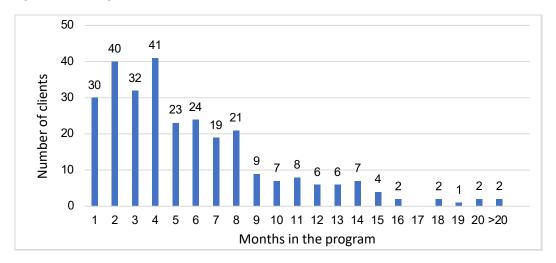
Note. Bolded statistics indicate statistically significant differences (p<.05) between clients who enrolled in the NYC HJN program within 0-3 months vs. more than 3 months of release.

## 5.8 NYC HJN duration and frequency of engagement.

As illustrated by the program logic model (Appendix), the effect of NYC HJN program participation is mediated by client engagement with CHWs who provide instrumental and emotional support to clients and help connect them with essential healthcare and social services. The extent of client engagement in the program constitutes program "dose," measured here by two variables: client duration in the program and number of documented contacts between CHWs and clients.

The average duration of program engagement, defined as the number of days between the first and last documented contact between CHW and a client, was 159 days (SD=134, range=1-971, Figure 4), which is in line with expectations given that the original protocol aimed to engage participants for around 6 months. However, due to the highly personalized nature of the program, there was a wide range in the extent of program engagement among clients. For example, some clients only had one need and exited the program once that need was met while others stayed in the program 20 months or longer. Note that at the time of this midevaluation report, some clients might still be in the NYC HJN program; thus, the duration of program participation may be underestimated here.

Figure 4. Client Program Duration.



We also examined client time in the program by client characteristics (Table 11). However, no significant differences were found based on these, which suggests that program engagement was equitable across different demographic groups. Some apparent trends of differences by age or gender, for example, cannot be confirmed due to the small samples of elderly individuals or women in the study.

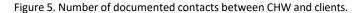
Table 11. Client time in program by demographics and self-reported health status.

		Time in pro	gram (days)
	n	М	SD
Age group			
18-25	14	160.2	108.6
26-35	62	154.9	160.9
36-50	93	166.1	119.6
51-61	73	170.3	134.4
62-72	20	155.0	115.4
73+	7	237.9	182.4
Gender			
Male	243	171.2	138.3
Female	17	112.7	88.9
Other	2	80.5	5.0
Race/ethnicity			
Black	149	153.1	132.2
Hispanic or Latino/a	78	182.1	132.4
White	22	170.1	150.6
Other	37	129.4	132.3
Education			
Less than high school	4	155.5	160.8
Some high school	74	167.4	159.0
High school (HS) diploma, GED, or HS equivalency	108	168.1	132.2
Some college or vocational school	42	167.5	119.0
Vocational degree or certification	11	128.1	63.5
Associates degree	13	152.8	127.4
College degree	16	171.4	121.3
Post-graduate degree	4	119.0	89.6

Other	2	67.5	40.3
Current employment			
Employed full-time	30	117.7	102.9
Employed part-time	12	131.6	115.5
Unable to work/disabled	12	161.9	116.5
Unemployed	220	172.3	138.6
Client has children 18 years old or younger			
No	177	173.0	144.8
Yes	97	147.7	110.4
Housing status			
Shelter	29	179.8	130.1
Single Room Occupancy	4	356.3	415.5
NYCHA	1	142.0	
Own home or apartment	8	107.3	102.5
Living with a family member or a friend's home	53	150.7	118.7
Transitional housing	49	125.4	116.5
Residential drug treatment facility	5	262.8	186.5
Halfway house	45	157.9	83.9
Hotel	33	170.1	138.1
Other	18	102.3	153.2
Multiple housing	41	192.4	142.0
Most recently released from			
Jail	48	147.7	166.2
Prison	226	167.5	126.3
Released within			
0-3 months	181	172.1	131.7
4-6 months	36	147.4	93.2
7-12 months	20	103.4	66.0
1-2 years	20	181.6	213.9
2-3 years	12	130.1	133.3
Less than 12 months ago (undefined)	1	592.0	
Less than 3 years ago (undefined)	4	160.0	96.9
Client's self-reported health			
Excellent	33	140.8	117.5
Very Good	48	180.2	135.0
Good	135	169.4	144.4
Fair	49	148.4	118.5
Poor	9	168.8	106.7

Note. Sample sizes may be different for each subgroup analysis due to missing data.

Figure 5 shows the distribution of the number of documented contacts between CHWs and clients (range=1-147 times). Contact includes meeting in person, completion of a phone call, or if the CHW delivered a voice or text message. The average was 22.4 times (SD=19.9). Most first contacts between CHW and clients were within 14 days of the intake evaluation (94.1%), with the majority of first contacts occurring within 7 days of the intake (88.1%). These data suggest that the program was efficient in engaging clients in the core activities of the program, ensuring minimal lag in the receipt of reentry services among participants.



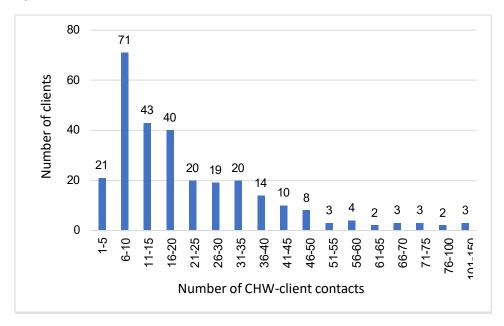


Table 12 shows the number of CHW and client contacts by demographics and self-reported health status at enrollment. Numbers of contacts were generally comparable across groups, though there were some trends of differences indicating that the unemployed had more frequent contacts with CHWs than the employed and that those with lower education had more contacts than those with higher education. However, as noted previously, differences should be interpreted with caution given the small sample sizes among subgroups.

Table 12. Number of documented CHW and client contacts by demographics and self-reported health status.

		Number of contacts			
	n	М	SD		
Age group					
18-25	14	22.64	17.36		
26-35	62	18.79	18.54		
36-50	93	23.87	19.74		
51-61	73	26.53	23.92		
62-72	20	20.70	12.84		
73+	7	25.29	12.18		
Gender					
Male	243	23.68	20.40		
Female	17	22.00	20.07		
Other	2	20.00	15.56		
Race/ethnicity					
Black	149	22.62	19.66		
Hispanic or Latino/a	78	24.16	18.32		
White	22	16.59	9.45		
Other	37	20.95	27.11		

Education

Less than high school	4	22.75	25.50
Some high school	74	23.43	20.44
High school (HS) diploma, GED, or HS equivalency	108	23.82	20.33
Some college or vocational school	42	27.26	24.76
Vocational degree or certification	11	17.09	9.02
Associates degree	13	15.85	9.77
College degree	16	19.94	12.36
Post-graduate degree	4	12.75	7.54
Other	2	16.00	15.56
Current employment			
Employed full-time	30	15.50	14.14
Employed part-time	12	19.50	17.50
Unable to work/disabled	12	20.58	14.65
Unemployed	220	24.51	20.84
Client has children 18 years old or younger		21.51	20.01
No	177	22.99	19.66
Yes	97	23.39	20.67
Housing status	- 37	23.33	20.07
Shelter	29	27.48	17.68
Single Room Occupancy	4	47.25	50.86
NYCHA	1	11.00	
Own home or apartment	8	18.38	15.91
Living with a family member or a friend's home	53	21.68	23.18
Transitional housing	49	21.27	16.00
Residential drug treatment facility	5	19.20	13.08
Halfway house	45	22.20	15.67
Hotel	33	27.12	27.52
Other	18	9.28	9.61
Multiple housing	41	22.29	15.34
Most recently released from	71	22.23	13.54
Jail	48	19.15	20.47
Prison	226	23.98	19.82
Released within	220	23.30	13.02
0-3 months	181	24.51	19.47
4-6 months	36	22.22	21.63
7-12 months	20	15.50	10.79
1-2 years	20	26.30	29.32
2-3 years	12	16.08	16.24
Less than 12 months ago (undefined)	12	9.00	
Less than 3 years ago (undefined)	4	16.00	8.87
Client's self-reported health	4	10.00	0.07
Excellent	33	21.36	21.14
	33 48		
Very Good	_	20.92	15.38
Good	135	25.42	22.78
Fair	49	20.02	15.38
Poor	9	23.00	13.42

Note. Sample sizes may be different for each subgroup analysis due to missing data.

## 6. CONCLUSIONS AND RECOMMENDATIONS

Among NYC HJN clients who participated in the recidivism study, most were released from prison rather than jail. This is partly attributable to the fact many more individuals were released from prisons than jails when the NYC HJN program began (see p.4). Most of the participants in this study were Black or Latino men and reported excellent, very good or good health at enrollment, with no differences in self-rated health by client demographics. Client needs varied greatly among participants. Of note, despite a high prevalence of self-reported

good health, primary care was the most frequently indicated need (more than half of the sample), followed by employment services and help with obtaining vital documents. There were only minor differences in self-reported needs by demographics. For example, emergency housing and family reunification or support services were requested more by women than men, employment services were requested more by people who were Black or Latino/a, and mental health services were most commonly requested by white clients. Clients released from jail reported more needs for mental and behavioral health services than those released from prison, which reflects public data documenting the high prevalence of mental health disorders (approximately 50%) of people incarcerated in NYC jails.<sup>27</sup> Furthermore, clients released from incarceration within the last 3 months reported a greater need for food assistance but less need for emergency housing than those released more than 3 months ago.

It is important to note that two-thirds of clients entered the NYC HJN reentry innovation program within 3 months of release from incarceration. This suggests that NYC HJN was effective at recruiting participants through incarceration sites and the large network of partner organizations in the community soon after release, a time period of heightened social and health vulnerability. In addition, in nearly all cases, CHWs successfully reached clients within one week of intake. Given the social and health benefits of reentry support, the rapid enrollment into a program such as NYC HJN may be important to prevent short- and long-term adverse outcomes among individuals with prior history of criminal legal system involvement.

As a testament to the central role that CHWs played in the program, we found that NYC HJN CHWs made service referrals for approximately 90% of the clients, a high rate of program fidelity and penetration. On average, clients stayed in the program for five months. However, the highly personalized nature of the program meant that the extent of program engagement varied widely among clients. Some clients only had one need and exited the program once that need was met while others stayed in the program 20 months or longer. In addition, on average, CHWs and clients were in contact frequently, with an average of 22 contacts during their program engagement.

#### 6.1 Limitations.

The administration of the needs checklist changed during the course of HJN such that needs data do not reflect baseline needs, but rather a mixture between participant needs identified throughout their time in HJN and the activities they worked on with a CHW. The following points should be considered when interpreting needs checklist data:

During early stages of the program, CHWs read through the entire checklist of needs when enrolling participants in HJN. This resulted in a long list of needs that was deemed unrealistic for CHW and participant to work on, potentially serving to discourage participants. HJN shifted to using the contact form — a shortlist of needs filled out by non-HJN personnel during referral to HJN — to drive the discussion of needs.

Further, the needs checklist may not reflect all needs that a participant has; rather, needs checklists are reflective of the work that a CHW and participant aim to tackle together. If a participant was working on a need outside of HJN, it would not have been included in the needs data.

Finally, a process for adding to participant needs during case closure was added midway through the program to improve tracking of needs met: if a participant worked on an activity with a CHW but it was not documented as a need during enrollment, it would be added to the checklist at case closure. As a result, some needs may feature prominently in the data, for example primary care, due to the program's priority to fill a gap in the reentry landscape by encouraging and incentivizing participants to attend primary care. Whether or not a participant identified it as a need upon intake, if they received a primary care referral or had a primary care appointment scheduled, then this need would have been added at case closure. Therefore, these needs data are more a measure of the health and social service activities that participants planned to or did undertake with a CHW as opposed to needs upon enrollment into the program.

#### 6.2 Recommendations.

Based on the results so far, we offer some recommendations for municipal public health and community-based partnership reentry programs at large in the future:

- Given the substantial burden of healthcare needs among people released from incarceration, municipal public health departments should organize, convene, and link reentry programs to primary care and other healthcare services with the employment and training of CHWs with reentry expertise being a top priority.
- Given evidence of differences in the level of need according to individual factors, there is a need to target and tailor holistic, wraparound, community-government reentry and healthcare programming according to individuals' specific needs and experiences.
- Healthcare, social services such as employment and housing, as well as social support must be integrated in municipal public health and community-based partnership reentry programs, as these different dimensions of needs are interconnected.
- Given that CHWs are an important source of instrumental and emotional support for individuals released from incarceration, resources should be devoted to developing a workforce of CHWs with lived expertise of reentry from the criminal legal system to support reentry.
- Individuals released from NYC jails rather than NYS or federal prisons report heightened
  needs for mental and behavioral health services, which may reflect differences in the
  incarcerated populations in jail vs. prison settings and/or differences in the oppressive
  conditions experienced during incarceration. This warrants further investigation so that
  additional resources can be directed to any high-need populations.
- Given that one-third of participants have children 18 years old or younger, our findings suggest that it may be important to consider family-based strategies of health and

wellbeing in future municipal public health and community-based partnership reentry programs.

Overall, the NYC HJN municipal public health and community-based partnership program has succeeded in engaging a representative sample of individuals recently released from incarceration in New York. As a municipal public health and community-based partnership program that seeks to address social and health inequity, the innovative approach to holistic, trauma-informed reentry program has demonstrated its ability to connect with and serve a predominantly minoritized population that is over-represented in the criminal legal system.

NYC HJN participants appeared to be highly engaged in the program, with frequent contacts with CHWs. CHWs played an essential role in providing social support and connecting participants to healthcare and social service organizations to help address varied client needs in these arenas. As the study is ongoing, the continuation of the current evaluation will shed further light on the efficacy of the NYC HJN program in preventing or delaying future reinvolvement in the criminal legal system.

## 7. REFERENCES

- 1. Carson EA. *Prisoners in 2019*. U.S. Department of Justice. October 2020. NCJ 25515. Accessed June 2, 2023. https://bjs.ojp.gov/library/publications/prisoners-2019.
- 2. Federal Bureau of Prisons. Release Numbers. Updated April 2023. Accessed June 2, 2023. https://www.bop.gov/about/statistics/statistics\_inmate\_releases.jsp.
- 3. NYC Open Data. Inmate Discharges. Updated June 1, 2023. Accessed June 2, 2023. https://data.cityofnewyork.us/Public-Safety/Inmate-Discharges/94ri-3ium.
- 4. Sawyer W. Since you asked: How many people are released from each state's prisons and jails every year? 2022. *Prison Policy Initiative*. Available at: https://www.prisonpolicy.org/blog/2022/08/25/releasesbystate/.
- 5. Browning SL, Miller RR, Spruance LM. Criminal incarceration dividing the ties that bind: Black men and their families. *Journal of African American Men* 2001; 6(1):87-102.
- 6. Haley DF, Golin CE, Farel CE, et al. Multilevel challenges to engagement in HIV care after prison release: a theory-informed qualitative study comparing prisoners' perspectives before and after community reentry. *BMC Public Health* 2014; 14:1253.
- 7. Travis J, McBride E, Solomon A. Families Left Behind: The Hidden Costs of Incarceration and Reentry. Washington, DC: Urban Institute, 2005.
- 8. Wildeman C, Wang EA. Mass incarceration, public health, and widening inequality in the USA. *Lancet*. 2017; 389(10077):1464-74.
- 9. Wolff N, Draine J. Dynamics of social capital and community reentry: ties that bind? *Journal of Correctional Health Care* 2004; 10(3):457-90.
- 10. Sampson RJ, Laub JH. Crime and deviance over the life course: The salience of adult social bonds. *American Sociological Review* 1990; 55(5):609-27.
- 11. Kawachi I, Berkman LF. Social ties and mental health. *Journal of Urban Health* 2001; 78(3): 458-67.
- 12. Cohen S, Underwood LG, Gootlieb BH. Social Support Measurement and Intervention: A Guide for Health and Social Scientists. New York, NY: Oxford University Press, 2000.
- 13. Khan MR, Scheidell JD, Golin CE, et al. Dissolution of committed partnerships during incarceration and STI/HIV-related sexual risk behavior after prison release among African American men. *Journal of Urban Health* 2018; 95(4): 479-87.
- 14. Khan MR, El-Bassel N, Golin CE, et al. The committed intimate partnerships of incarcerated African American men: implications for sexual HIV transmission risk and prevention opportunities. *Archives of Sexual Behavior* 2017; 46(7): 2173-85.
- 15. Wang EA, Hong CS, Shavit S, Sanders R, Kessell E, Kushel MB. Engaging individuals recently released from prison into primary care: a randomized trial. *American Journal of Public Health* 2012; 102(9):e22-e29.
- 16. Fox AD, Anderson MR, Bartlett G, Valverde J, Starrels JL, Cunningham CO. Health outcomes and retention in care following release from prison for patients of an urban post-incarceration transitions clinic. *Journal of Health Care for the Poor and Underserved* 2014; 25(3):1139-52.
- 17. Morse DS, Wilson JL, McMahon JM, Dozier AM, Quiroz A, Cerulli C. Does a primary health clinic for formerly incarcerated women increase linkage to care? *Womens Health Issues* 2017; 27(4): 499-508.
- 18. Visher C, La Vigne NG, Travis J. Returning Home: Understanding the Challenges of Prisoner Reentry. Maryland Pilot Study: Findings from Baltimore. Washington, DC: Urban Institute, 2004.
- 19. La Vigne NG, Visher C, Yahner J. Chicago Prisoners' Experiences Returning Home. Washington, DC: Urban Institute, 2004.
- 20. Western B. The impact of incarceration on wage mobility and inequality. *American Sociological Review* 2002; 67(4):526-46.

- 21. Travis J. But They All Come Back: Facing the Challenges of Prisoner Reentry. Washington, DC: Urban Insitute, 2005.
- 22. Council of State Governments Justice Center. Opportunities for criminal justice systems to increase Medicaid enrollment, improve outcomes, and maximize state and local budget savings. New York, NY: Council of State Governments Justice Center, 2013.
- 23. Morrissey JP, Domino ME, Cuddeback GS. Expedited Medicaid enrollment, mental health service use, and criminal recidivism among released prisoners with severe mental illness. *Psychiatric Services* 2016; 67(8):842-9.
- 24. Bazelon Center for Mental Health Law. For people with serious mental illnesses: finding the key to successful transition from jail or prison to the community. An explanation of federal Medicaid and disability program rules. Washington, DC: Bazelon Center for Mental Health Law. 2009.
- 25. Hearn LE, Whitehead NE, Khan MR, Latimer WW. Time since release from incarceration and alcohol and drug use among women: the potential protective role of committed partners during re-entry. *AIDS and Behavior* 2014; 19(6):1070-7.
- 26. Hinz A, Zenger M, Leuteritz K, Mehnert-Theuerkauf A, Petrowski K. Do patients suffering from chronic diseases retrospectively overestimate how healthy they were before they fell ill?. *Int J Clin Health Psychol*. 2021;21(3):100230. doi:10.1016/j.ijchp.2021.100230
- 27. Mayor's Management Report. The City of New York Mayor's Office of Operations. September 2022. Accessed June 2, 2023. <a href="https://www.nyc.gov/assets/operations/downloads/pdf/mmr2022/2022\_mmr.pdf">https://www.nyc.gov/assets/operations/downloads/pdf/mmr2022/2022\_mmr.pdf</a>.

#### 8. APPENDIX

## Appendix 8.1. Program logic model

#### Program Logic Model for the Health Justice Network and Its Impact on Recidivism

#### Problem

Persons recently released from incarceration with little to no community or material supports often experience social isolation and low self-efficacy. Structural inequities further complicate their ability to meet basic social needs, resulting in these individuals experiencing food and housing instability and unemployment. Structural inequities likely contribute to high rates of mortality in the immediate post-release period, a range of chronic conditions, and the likelihood of their re-involvement in the criminal-legal system (CLS).

Goal To implement the Health Justice Network (HJN)—a government-community voluntary public health program employing community health workers (CHWs) with lived experience of the criminal-legal system (CLS) who work with persons released from incarceration to counter systemic racism — in order to bridge both healthcare and social service needs, strengthen self-efficacy, and reduce further exposure to the CLS.



#### Rationale/Assu mption

By providing voluntary services, increasing access to quality healthcare, addressing social determinants of health and increasing selfefficacy of individuals recently released from incarceration, HJN promotes health and social equity, and reduces exposure to the CLS and recidivism.

CHWs with lived experience of the CLS provide case management, navigation, peer support, advocacy and connect participants with needed resources.

#### **Program Activities**

CHW staff recruitment and skills training for case management by DOHMH

Training for CHW and primary care provider (PCP) staff on Trauma & Resiliency Informed Care

Community outreach to support recruitment and networking by attending community, reentry, and faith-based events and health fairs to promote HJN and recruit potential clients.

Each client assigned a CHW who will provide linkages to healthcare & social services.

Peer support services that validate participant experience with CLS and establish trusting working relationship with participants

CHWs embedded in six PCP & CBO organizations work with participants to identify priorities and determine client strengths, prioritize health & reentry support needs, and identify goals.

Via case management, CHWs help participants identify healthcare & social service needs and related goals, increase self-efficacy to meet goals, and provide support

CHWs perform accompaniment to appointments, home visits, regular phone calls to clients, and court advocacy

Embedded CHWs link participants to primary care at PCP sites and telehealth visits, in addition to connecting to other behavioral and specialty care such as dental, behavioral, including mental health and substance use services

CHWs also facilitate linkage to education, housing support services, employment, substance use, and benefits enrollment services

Contact with client as requested by client (e.g., as needed basis for participants with lower needs and more regular contact for participants with higher needs)

# Outputs Out

# of participants

enrolled

trained

# of services provided to participants by CHWs

# of referrals made

# of unique touchpoints CHWs have with participants

# of appointments completed

# of persons with CLS involvement reporting that their needs are met

Types & frequency of services requested and met (e.g., primary care, housing, education, and employment services)

#### Outcomes Key DOHMH

metrics: Increased self-

efficacy and social capital

Connection to health and social services

Established relationships with organizations that provide long-term

Key PRC metrics:

supports

Frequency, characteristics, and time to reinvolvement in the criminal-legal system:

Re-arrest
Re-conviction

Re-incarceration

# Impacts

CHWs with lived experience integrated into health and social care

settings

of color

Reduced criminal-legal system exposure in communities

Improved racial and health equity in the population

Increased access to, utilization of, and retention in health and social services

# Appendix 8.2.

Table 1S. Service referrals per client.

Service n  Health-related Primary care 136 Specialty health services 34 Dental care 53 Prenatal care services 0 Mental health services or emotional support 67 Substance use treatment 39 Health promotion/education 53 Other healthcare services 39 Harm reduction services 38 Health insurance 57  Housing Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68	% 47.6 11.9 18.5 0 23.4
Primary care 136 Specialty health services 34 Dental care 53 Prenatal care services 0 Mental health services or emotional support 67 Substance use treatment 39 Health promotion/education 53 Other healthcare services 39 Harm reduction services 38 Health insurance 57  Housing Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68	11.9 18.5 0 23.4
Specialty health services Dental care Specialty health services Prenatal care services O Mental health services or emotional support Substance use treatment 39 Health promotion/education 53 Other healthcare services 39 Harm reduction services 38 Health insurance 57  Housing Emergency housing Housing support services 84  Food Emergency food Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	11.9 18.5 0 23.4
Dental care 53 Prenatal care services 0 Mental health services or emotional support 67 Substance use treatment 39 Health promotion/education 53 Other healthcare services 39 Harm reduction services 38 Health insurance 57  Housing Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	18.5 0 23.4
Dental care 53 Prenatal care services 0 Mental health services or emotional support 67 Substance use treatment 39 Health promotion/education 53 Other healthcare services 39 Harm reduction services 38 Health insurance 57  Housing Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	0 23.4
Mental health services or emotional support  Substance use treatment  Health promotion/education  Other healthcare services  Harm reduction services  Health insurance  Thousing  Emergency housing  Housing support services  Food  Emergency food  Supplemental Nutrition Assistance Program (SNAP/WIC)  Employment/income/job training	23.4
Substance use treatment 39 Health promotion/education 53 Other healthcare services 39 Harm reduction services 38 Health insurance 57  Housing Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	
Health promotion/education 53 Other healthcare services 39 Harm reduction services 38 Health insurance 57  Housing Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	12.0
Other healthcare services 39 Harm reduction services 38 Health insurance 57  Housing Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	13.6
Harm reduction services 38 Health insurance 57  Housing Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	18.5
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Housing Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	13.3
Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	19.9
Emergency housing 34 Housing support services 84  Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	
Housing support services 84  Food  Emergency food 31  Supplemental Nutrition Assistance Program (SNAP/WIC) 68  Employment/income/job training	11.9
Food Emergency food 31 Supplemental Nutrition Assistance Program (SNAP/WIC) 68 Employment/income/job training	29.4
Supplemental Nutrition Assistance Program (SNAP/WIC) 68 Employment/income/job training	
Supplemental Nutrition Assistance Program (SNAP/WIC) 68 Employment/income/job training	10.8
Employment/income/job training	23.8
Employment services 145	50.7
Supplemental security income (SSI) 30	10.5
Social security disability (SSD) 31	10.8
Career education support 46	16.1
Career development services 102	35.7
Vocational training 93	32.5
Family	
Family (reunification or support) services 45	15.7
Family/social connectedness services 34	11.9
Legal	
Legal services 50	17.5
Obtain vital documents 125	43.7
Phone/transportation	
Phone assistance 53	18.5
Transportation assistance (i.e., MetroCards) 36	12.6
Other	12.0
	10 E
	18.5
Other emergency services 30	10.5
LGBTQIA support services 0	0
Peer support Accompaniment to appointments	0