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Road Map Initiative

Merging Data from Cook County Jail and the Homeless Management Information System: Preliminary Findings

OVERVIEW

Municipalities across the country wrestle with how to help "high utilizers" of multiple sectors, namely homeless services, jails, and the emergency health system. News media as well as individual entities report that high utilizers use a disproportionate amount of resources. Policymakers and advocates are proposing and piloting a range of strategies. This brief provides additional information for those efforts in Chicago.

We know that a person's well-being doesn't come from any single system, and neither do available services. The Road Map Initiative seeks to examine and address the outcomes for people who use our systems most — not just a single system, but multiple systems.

This brief summarizes what we have learned about "cycling high users" (CHUs) — people who cycle at high rates between homeless services and Cook County Jail in Chicago. We followed CHUs over time to better understand their service use patterns, general characteristics, and common profiles, and list factors that help identify those at highest risk to target them for additional services and help end the cycling of high users across the criminal justice, homeless services, and health sectors in Chicago.

We analyzed data from the Homeless Management Information System (HMIS) and the Cook County Jail, with the support of the Cook County Sheriff's Office and All Chicago. Merging data across sectors is providing unprecedented insights into the true scope of utilization, both the amount of CHUs and service utilization patterns.

The results detailed in this brief can help administrators of programs and services and direct service professionals in the following ways:

Improve Outcomes

By identifying factors that increase or decrease risk of cycling across these two systems, program administrators can identify appropriate strategies to prevent homelessness and protect against recidivism. Our analyses show that previous homelessness increases risk of future homelessness and previous jail bookings increase the likelihood of a future jail booking. By identifying characteristics and risk factors, we hope to help systems identify people who have high service needs in multiple sectors, prevent people from becoming high utilizers, and improve outcomes for vulnerable populations.

Target Services to CHUs

By identifying common characteristics of CHUs, we hope to help program administrators and providers identify individuals for targeted referrals and services so that people get the right services at the right time.

Inform Allocation of Resources

Our objective is to ensure that the systematic data analysis we conduct is accessible to decision makers to help inform policy and program decisions, leading to the strategic allocation of limited resources to best help end the cycling of CHUs.

LINKING DATA TO DEFINE HIGH UTILIZATION

The Health Lab identified people who engaged in homeless services and spent time in Cook County Jail during a four-year study period (January 1, 2014 to December 31, 2017). Roughly 15,000 people encountered both sectors at least once (Figure 1).

Of this group, the Health Lab identified roughly 7,000 Cycling High Users (CHUs) with a pattern of "high use," defined as four or more encounters with the jail OR homeless services sector during the four-year period. While CHUs on average spent more than three times the number of days in jail, shelter, or homeless outreach services than the typical detainee or homeless client, CHUs had four unique patterns of service use:

254,929

records examined

59,274 from HMIS

195,655 from Cook County Jail

15,075

individuals found in both homeless services and jail records, representing **25.4%** of all homeless clients and **7.7%** of all detainees

6,908

Cycling High Users

Fig. 1 — Numerical breakdown of homeless and detainee population

1 Combined Users (N=2,526)

Some CHUs were not cycling at high rates in either sector alone but did demonstrate "high use" combined across the two sectors.

365+ combined days in shelter, outreach, and jail OR 4+ combined stays in shelter or jail

2 Extreme Users (N=363)

A very small number (approximately 400) of CHUs had a high number of encounters in both sectors, spending 455 days on average in the two systems over the four-year period.

Individual meets "high user" criteria for both jail and homelessness

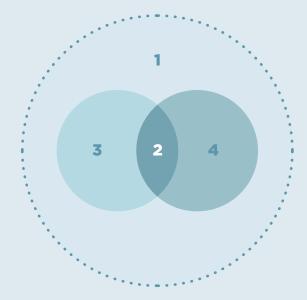


Fig. 2 — Patterns of service use; every Cycling High User (N=6,908) had at least four encounters with the jail and homeless services sector in the four-year study period (1.1.2014-12.31.2017).

3 High Users of Homeless Services (N=1,176)

Some CHUs were more frequently engaged with the homeless services sector but were only in the jail one or two times.

5+ shelter stays or 3+ shelter stays and 120+ shelter days or 365+ shelter days or 365+ street outreach days

4 High Users of Jail (N=2,843)

Other CHUs returned to the jail many times, but experienced homelessness infrequently.

4+ jail stays or 3+ stays and 365+ days

CYCLING HIGH USER GENERAL CHARACTERISTICS

As an overall population, CHUs:

- Are predominantly male (82%) and African American (79%)
- Generally present to the homeless services sector as single individuals, although there were still almost 700 CHUs who accessed services as part of a family
- Are most commonly booked in the jail for "crimes of survival" (e.g. retail theft and trespassing) and drug possession

Behavioral Health Challenges among CHUs

CHUs have higher rates of self-reported or observed behavioral health conditions than average detainees. Compared to jail detainees who never accessed homeless services, CHUs are four times more likely to have received an operational psychological alert ("P-alert") while in the jail and are six times more likely to have received a P4 alert, thus requiring institutionalized care. CHUs are also four times more likely to have received detox treatment upon arrival to the jail and three times more likely to have received operational medical alerts ("M-alert").

Rates of federally-qualifying disabilities among CHUs

Compared to homeless services clients who did not enter the jail during the study period, CHUs are 24% less likely to be receiving SSI or SSDI, which is considered to be a proxy for having a federally-qualifying disability. Not receiving SSI or SSDI may mean that an individual does not meet the federal disability standard or that they have not attempted or successfully applied to meet the federal disability standard.

Understanding sources of data on behavioral health conditions

While in Cook County Jail, detainees receive additional services if they have an "alert" designating specific medical or behavioral health needs. These operational "alerts" inform the type of care they receive. While an "alert" does not serve as a formal medical or mental health diagnosis, it does reflect the need for different levels of services or placements for a detainee's care. Psychological needs are designated by "P-alerts" and medical needs are designated by "M-alerts." "Alerts" are accompanied by a numerical rating ranging from 2-4, with a higher rating indicating a more intensive need. For example, a P2 alert indicates a lowlevel mental health need, while a P4 alert requires an institutional level of mental health care.

COMMON PROFILES OF CYCLING HIGH USERS

The Health Lab also identified common profiles of CHUs using a statistical technique called "cluster analysis." This approach allows us to see which characteristics are commonly seen together among different types of CHUs. We chose to look at characteristics that have implications for the type of care from which distinct CHUs may benefit, including proxies for behavioral health challenges, family status, types of criminal charges, and age. We found three common profiles of CHUs with distinct characteristics:







Each of these profiles is described in more detail below (Figure 3). It is important to note that these are not the only clusters present among CHUs. In fact, some of these profiles showed "sub-clusters" within them with slightly distinctive characteristics. This information should be taken as a general resource to help guide care, but all decisions should be made on a case-by-case basis by trained professionals.



Older people with multiple vulnerabilities

53% of all CHUs (~3,700 people)

45% ever received mental health supports in jail 45% ever received detox services

- In the largest sub-cluster (-2,400), 99% of CHUs are over 35 years old (average age = 49.6, ± 7.5 years)
- This sub-cluster is the most likely of all CHUs to engage with homeless street outreach services (i.e. proxy for living unsheltered) and to selfreport a disabling condition
- A small sub-cluster (-425) has higher rates of behavioral health issues; 71% have ever received mental health supports in jail, 61% ever received detox
- This sub-cluster spent the highest average number of days and stays in the jail of any cluster (279 days)
- Another sub-cluster (-830) of older people exhibited high rates of substance use (most common charge is drug possession, most likely to have received detox upon jail entry)



Young singles

40% of all CHUs (~2,800 people)

39% ever received mental health supports in jail **33%** of those who received mental health supports required in-patient psychiatric treatment

- 84% of young singles are under age 35
- This group receives typical CHU charges (such as retail theft and trespassing), with the exception of a sub-cluster that was most commonly charged with domestic violence (this sub-cluster skews a little older)
- Only about 7% of young singles have ever stayed in permanent housing provided through Chicago's Continuum of Care (i.e. the homeless services sector)



7% of all CHUs (~500 people)

76% between ages 18- 34

57% female (the highest of any CHU profile) 89% black (the highest of any CHU profile)

- Most likely of all CHUs to selfreport income, benefits, and health insurance
- Most commonly charged with domestic violence, and 3 out of 10 report being a survivor of DV
- Lowest rates of behavioral health issues of all CHUs
- Spend the most days in shelter out of all CHUs (average = 138 days in study period)
- Most likely of all CHUs to ever stay in permanent housing provided through Chicago's Continuum of Care (19%)

Fig. 3 — Common profiles of Cycling High Users

RISK FACTORS AND PROTECTIVE FACTORS FOR INCARCERATION AND HOMELESSNESS

Being able to determine whether people are more likely to first encounter the jail or access homeless services in the Continuum of Care (CoC) (i.e. homeless services sector) remains a challenge. In our study period, 60% of individuals entered the jail prior to accessing CoC services (either shelter or street outreach). However, this finding may be because people simply spend more time in jail than they do in shelter or outreach. Individuals who encountered both the jail and homeless service systems spent an average of 60% of their combined service days during the study period in jail and the remaining 40% in shelter or outreach.

To help clinicians in the jail and homeless services sector identify people at highest risk of cycling between the sectors, the Health Lab conducted an analysis to identify characteristics associated with a person's likelihood of experiencing homelessness after being released by the jail, or conversely, the risk of spending time in the jail after engaging in homeless services (Figure 4). These characteristics can help target people for referrals and/or additional services, with the goal of decreasing the total number of people who end up becoming CHUs.



The average CoC client experiencing literal homelessness has an **18.6%** likelihood of entering Cook County Jail within 18 months of engaging in homeless services.



Factors associated with an **increased** likelihood of jail entry

Highest increase

Prior jail bookings

Previously booked in last 18 months

Young age

Age 18-44, as compared to 45+; each year younger is associated with an increased risk

Evidence of disabilities

Receiving SSI or SSDI (self-reported disabling condition, not significant for ages 18-24)

Prior homelessness

Previously homeless in last 18 months

Factors associated with a **decreased** likelihood of jail entry

Protective markers

- Living in permanent housing in the last 18 months (if age 18-24) or transitional housing (if 25 or older)
- Has income (if 25 or older)

Demographics

As compared to male, single, and African American

- Female
- In a family with kids
- White (if 25 or older)
- Hispanic (if 25 or older)





Lowest

increase

The average person leaving the jail has a **3.8%** likelihood of engaging in homeless services in Chicago's Continuum of Care (CoC) within 18 months of discharge.



increase

Factors associated with an **increased** likelihood of homelessness

Highest increase

Previous experiences with homelessness

Engaged in CoC services while homeless in the 18 months prior to jail entry, and especially in the month prior

Received mental health services while in jail

Ever received a P4, P3, or P2 alert

Previous jail stays

Older age Age 45-64 at release

Type of charge for current booking

Retail theft, property theft, or trespassing charge

Evidence of substance use

Possession charge or has ever required detox at entry

Fig. 4 — Characteristics of people at highest risk of cycling between sectors

We thank you for your ongoing support and engagement with the Road Map Initiative. The involvement of provider organizations, policymakers, and other stakeholders is incredibly valuable to bringing this work to life and for ensuring that it is useful to those serving people who cycle through the emergency health, homeless services, and justice systems.

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