Integrating Data to Better Measure Homelessness

DCHS Data Insights Series

King County

King County has long recognized that point-in-time counts and individual data systems undercount the number of unhoused people in our region. Integrating data from systems beyond those focused on homeless response enables better estimates of homelessness.

Comprehensive data are essential to understanding complex problems and measuring how well responses to those problems are working. Recognizing that point-in-time counts and data from the Homeless Management Information System (HMIS) were measuring subsets of the larger unhoused population, King County has recently leveraged our newly integrated data systems to improve our ability to count the number of people experiencing homelessness.

Since 2018, King County Department of Community and Human Services (DCHS), Seattle-King County Public Health (SKCPH), and King County Information Technology (KCIT) have invested in data infrastructure to link data from HMIS, Health Care for the Homeless Network (HCHN), and King County's Behavioral Health and Recovery Division (BHRD), among other data sources. This new data resource became available as the COVID-19 pandemic began in 2020 and has already helped us to better prioritize scarce resources, plan for pandemic response, and identify gaps between systems serving our most vulnerable neighbors.
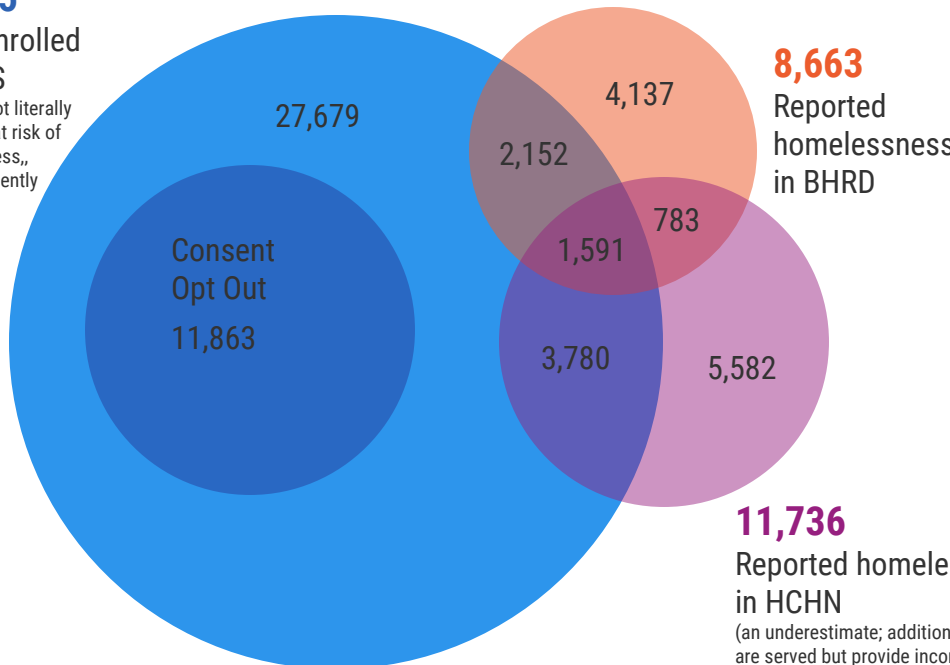
Using this integrated data to better estimate the number of unhoused members of our community, a recent DCHS analysis estimates that about 7,300 people served by HCHN or BHRD programs experienced homelessness at some point during 2020 who were not identified as receiving services in HMIS. In coordination with the King County Regional Homelessness Authority and HCHN, DCHS will build upon this work to determine what drives these findings, identify ways to better align services across systems, and drive better understanding of and responses to homelessness.

FIGURE 1: OVERLAP BETWEEN PEOPLE SERVED IN ANY HMIS PARTICIPATING PROGRAM* AND LITERALLY HOMELESS INDIVIDUALS IN BHRD/HCHN IN 2020

47,065
Total enrolled in HMIS
(includes not literally homeless, at risk of homelessness,, and permanently housed)

27,679

Consent Opt Out
11,863

8,663
Reported homelessness in BHRD

4,137

2,152

783

1,591

3,780

5,582

11,736
Reported homelessness in HCHN
(an underestimate; additional HCHN clients are served but provide incomplete data)

Washington State has an "opt in" HMIS consent policy. Compared to other states, this results in a larger share of people choosing not to share personal identifiers. This limits who we can link across systems.

Among identified people in HMIS, about 27.1% are linked to a homeless record in either BHRD or HCHN. If we assume that rate is the same in the opt out population, **the mostly likely number of people living homeless without an HMIS enrollment in 2020 was about 7,300.**

*Note, total HMIS enrollments includes ALL enrollments, regardless of homeless status. Of the 47,065 unique clients in 2020, 21,363 were identified as literally homeless at some point in the year. Others include people served by permanent supportive housing, prevention programs, and households in homeless crisis response programs that do not meet the HUD literally homeless definition. Sources: Seattle-King County Point-in-Time Count, Seattle-King County Homeless Management Information System, King County behavioral health system data, Health Care for the Homeless Network data
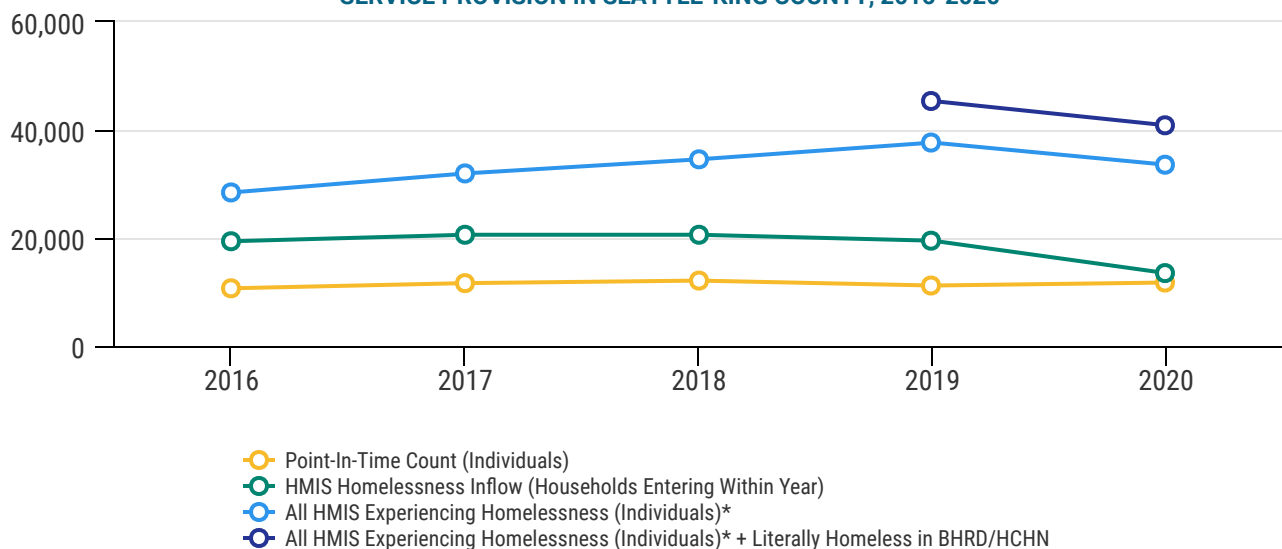
1 Integrating administrative data and analyzing data on an annualized basis improves estimates of the number of people experiencing homelessness in King County.

Despite its consistent recognition as an undercount, the Point-in-Time Count (PIT), annually conducted on a single night in January, remains the number most associated with the scale of our homelessness crisis. The PIT is significantly lower than annualized estimates of households experiencing homelessness who *newly enter* the homeless response system each year (approximately 19,500 in 2019 and 13,500 in 2020) and the number of people experiencing homelessness served *at any point in the year* (approximately 37,600 in 2019 and 33,500 in 2020) in HMIS participating programs.

Integrating HCHN and BHRD data with HMIS, **we estimate that about 40,800 people in 2020 and 45,300 people in 2019 experienced homelessness at some point in the year**. While we do not expect to see perfect overlap between populations, there are several possible explanations for why some people appearing in BHRD or HCHN data may not be served in HMIS programs. More exploration is needed to understand the driving factors, but hypotheses include:

- Given scarce housing resources, individuals may feel discouraged from proactively seeking homeless system services if they expect long wait times.
- Missing or low quality data may limit matching across systems. Washington is the only state that requires local homeless systems to ask participants if they'd like to opt into including personal identifiers in HMIS. Roughly 30% of people receiving services tracked in HMIS choose not to opt in. Without this information, they cannot be matched to identities in data from other systems.
- Individuals with high behavioral health needs may be less likely to access homeless system services and more likely to experience barriers to entry and assessment.
- Broader geographic distribution of HCHN service providers, particularly mobile services, may reach areas where fewer HMIS participating programs are available.
- HCHN and BHRD service providers may in effect be aiding with activities needed to secure or stabilize housing, but these services do not appear in HMIS because they do not receive HUD funding.
- There are some homeless system providers who are not required to enter data into HMIS, and as a result their clients may appear in other systems, but not in HMIS.

FIGURE 2: MEASUREMENTS OF HOMELESSNESS COMPARED TO CRISIS RESPONSE AND HOMELESS HOUSING SERVICE PROVISION IN SEATTLE-KING COUNTY, 2016-2020

- Point-In-Time Count (Individuals)
- HMIS Homelessness Inflow (Households Entering Within Year)
- All HMIS Experiencing Homelessness (Individuals)*
- All HMIS Experiencing Homelessness (Individuals)* + Literally Homeless in BHRD/HCHN

*Includes literally homeless individuals as well as those who do not meet the literally homeless definition, but enrolled in emergency shelter, coordinated entry, safe haven, and street outreach. Sources: Seattle-King County Point-in-Time Count, Seattle-King County Homeless Management Information System, King County behavioral health system data, Health Care for the Homeless Network data

2 **People experiencing homelessness who only receive services from BHRD/HCHN differ demographically from people enrolled in homeless response system programs who are not identified as homeless in BHRD/HCHN.**

We examined the demographic differences between the following two groups:
- Group A: People enrolled in HMIS, but not indicated as living homeless in BHRD or HCHN
- Group B: People who did not appear in HMIS, but were indicated as living homeless in BHRD or HCHN

The analysis identified the following trends:
- People in Group A are more likely to be Black/African American (44% compared to 26%).
- People in Group B are more likely to be white (66% compared to 50%).
- People in Group A are more likely to be American Indian or Alaska Native (12% compared to 9%) and Native Hawaiian or Pacific Islander (7% compared to 4%).
- People in Group A are more likely to be youth or young adults (33% compared to 12%), whereas people in Group B are more likely to be adults (88% vs. 67%).

FIGURE 3: Demographic Characteristics Where HMIS Clients Differ From BHRD/HCHN-Only Clients, 2020
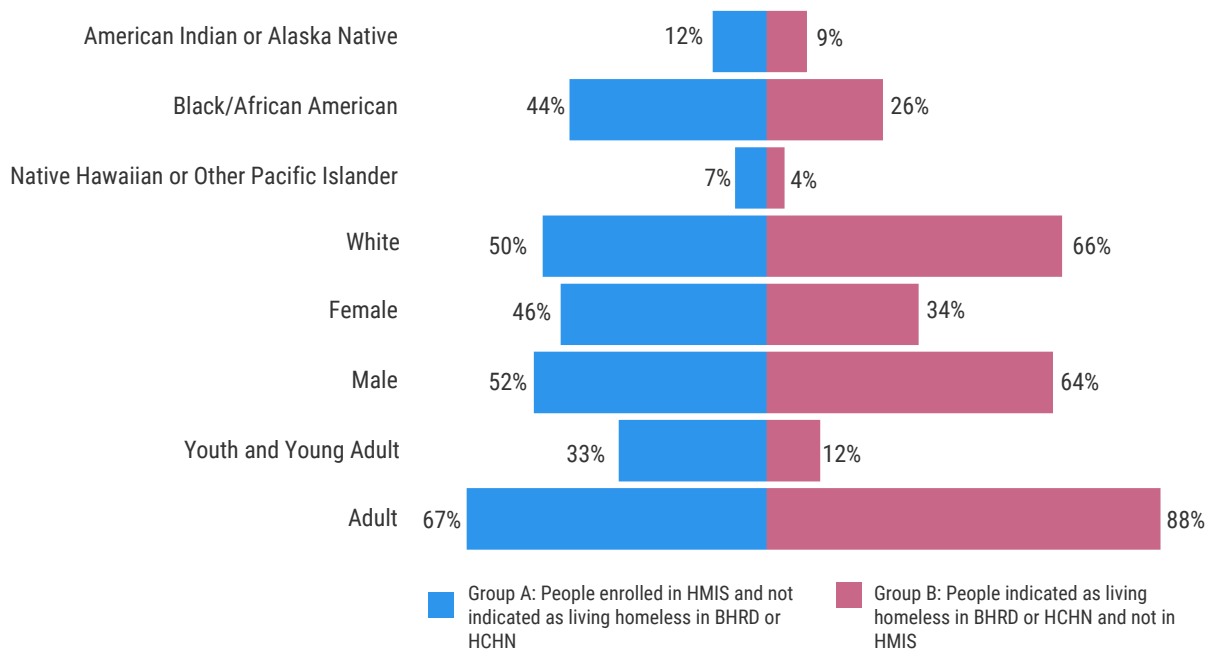
Sources: Seattle-King County Point-in-Time Count, Seattle-King County Homeless Management Information System, King County behavioral health system data, Health Care for the Homeless Network data

Demographic differences may be partially explained by the nature and quantity of services that each system provides. For example, the homeless response system includes many youth and family-focused shelter and homeless housing programs.

Relying on service-based administrative data to understand and enumerate the County's population living homeless impacts the demographic picture we see, as trends largely become a function of who services are targeted to and reach. Cross-system analysis helps us identify more people experiencing homelessness and obtain a fuller picture of this population's characteristics.

Key Takeaways

In summary, through integrating multiple sources of data and building cross-system data analysis capabilities, King County can better identify who experiences homelessness in our community, better estimate the scale of our housing and homelessness crises, and better equip policymakers and program implementers to design effective responses.

1. **This analysis supports the position that HMIS only counts a portion of the homeless population. An estimated 7,300 individuals experiencing homelessness in 2020 received services through HCHN or behavioral health programs, but were not identified in HMIS.**

2. **This analysis also supports the position that the Point-in-Time Count has always been an undercount. The number of individuals identified in HCHN or behavioral health system data, but not in HMIS, is more than half the annual Point-in-Time Count, and we already know that many more households interact with HMIS at some point in the year than are counted in a single night.**

3. **King County needs to keep exploring the analyses' findings. Explanations for the lack of overlap between system may include access issues, differences in geographic coverage, insufficient outreach resources, differences in funding and data entry requirements, and data quality issues. More quantitative and qualitative exploration is needed to test these hypotheses.**

4. **King County needs to understand why different programs are serving significantly different client populations. People experiencing homelessness who appear only in HCHN or behavioral programs, and not in HMIS, are more likely to be white, adults, and male.**

Next Steps

DCHS will continue to build upon and use its integrated administrative data infrastructure to better coordinate program operations, identify service gaps, evaluate promising programs, and improve program outcomes and equity. DCHS plans to coordinate with the new King County Regional Homelessness Authority, Health Care for the Homeless Network, and behavioral health system to better understand the driving factors behind these trends and identify opportunities to better coordinate and resource systems to serve our neighbors living unhoused. Follow-up analysis will include deeper looks at the overlap between programs and pathways within and between systems, as well as qualitative work to contextualize findings and understand causal mechanisms.

Appendix: Methodology

Since 2018, DCHS, Public Health Seattle-King County, and King County Information Technology (KCIT) have collaborated to build new data infrastructure that integrates client data from HMIS, behavioral health programs, Health Care for the Homeless Network, and other health and human services datasets on an ongoing basis. This technology uses highly customized identity linkage algorithms to create a unique person identifier that allows analysts to securely and consistently identify a unique individual across previously siloed databases.

Each individual data source separately collects information about program enrollments and individuals' living situations. For this analysis, we queried each database separately to find clients with HMIS enrollments and/or experiencing homelessness in 2020 (see definitions in Table 1). We then used our integrated client data to identify the population overlaps summarized in Figure 1. We included all enrolled HMIS clients regardless of housing status in order to maximize the chances of finding homeless BHRD/HCHN clients in HMIS, providing the most confidence that the estimated additional 7,300 BHRD/HCHN clients we identify are actually unknown to HMIS providers.

All estimates of clients experiencing homelessness served by systems other than HMIS should be interpreted as an undercount. Across systems, information on living situation is not collected from every client at every point of service. As a result, we are likely missing clients whose experience of homelessness is not recorded in that data system that year.

TABLE 1: DATA SOURCES AND DEFINITIONS OF HOMELESSNESS

Source	Timeframe	Population Definition
Seattle-King County Homeless Management Information System (HMIS)	2020	To maximize potential to identify matches, all people with an enrollment active at any point in 2020 are included in this analysis, regardless of their housing status.
King County Behavioral Health System Data (BHRD)	2020	Based on response to "What is your current housing arrangement?" Emergency shelter (e.g., missions, churches) where residence is on a 'night by night basis', living on the streets, in a vehicle, or abandoned building, being discharged/discharged from an institution (e.g., jail, medical or psychiatric hospital) with no arranged residence; Temporary living accommodations by a voucher system (e.g., motel vouchers); Living in a public or private place not designed for, or not ordinarily used as, a regular sleeping accommodation for human beings; Temporary housing, intensive assistance required; Transitional housing
Health Care for the Homeless Network (HCHN): Includes patients seen by Seattle & King County Public Health's clinic system and twelve contracted community partners.	2020	HCHN definition comes from Section 330 of the Public Health Service Act. Based on response to "Where did you sleep last night?" Streets, in a vehicle, or abandoned building Encampment Emergency shelter/voucher Transitional housing