The Allegheny County Department of Human Services’ data-driven efforts to improve services for people experiencing homelessness

October 2021
In 2015, the U.S. Department of Housing and Urban Development (HUD) overhauled its regulations governing services to people experiencing or at risk of homelessness. The new guidelines required local agencies operating emergency housing programs to implement a coordinated entry (CE) system for referrals to all providers and to prioritize the most vulnerable clients. This change reinforced the Obama administration’s “Housing First” policy, which emphasized getting clients into stable housing immediately, without preconditions, as a key step toward addressing individuals’ behavioral health, substance use and/or other challenges.

Implementing the CE system required a major shift for housing providers, who had been accustomed to selecting the clients they would serve based on their own assessments and policies. Because the new system objectively refers clients to the most appropriate available housing option, providers had to be prepared to accept any client referred, including those — previously excluded from many providers’ services — who may not pass a drug/alcohol screening.

Whereas some counties and regions balked at making the change, the Allegheny County Department of Human Services (DHS) embraced the challenge, seeing an opportunity to improve equity, efficiency and effectiveness in connecting people to housing and other service interventions that would more rapidly end their homelessness.

The process encountered some significant bumps common to HUD-funded entities across the country. DHS’s early efforts led to long waiting lists, unfilled shelter beds and some disgruntled clients. But five years later, DHS staff and providers agree that Allegheny County’s response to CE has yielded important improvements. This report describes the sometimes challenging but rewarding route by which DHS established a well-functioning system of CE and utilized data to make continuous improvements.

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FIRST STEPS TO CENTRALIZATION

Early on, Allegheny County’s Homeless Advisory Board (the HAB) decided on a centralized intake approach to CE, rather than an approach that allowed for multiple entry points. The advantage to this approach was that clients would have to make only one call instead of reaching out to numerous providers before finding a place to stay. “Our goal,” said Chuck Keenan, who was managing homeless services for DHS at the time, “was that people should just have to make one phone call and tell their story one time, and then we would send referrals to providers when they had openings.”
However, in order for the one call to work, DHS had to be able to track which housing programs had vacancies at any given time, prioritize services for those with the most serious needs, reduce barriers to receiving service — particularly individual provider exclusionary criteria — and more effectively administer use of all available units across the housing network.

Unlike other jurisdictions, many of whom use their local 2-1-1 help line to field housing assistance calls, DHS decided to expand the capacity of its Allegheny Link (the Link) call center, which had a decade of experience handling calls and making referrals for individuals over the age of 60 or with a disability.

The Link initially doubled its staff from three to six in-office coordinators, but that proved to be nowhere near enough for the dramatically increasing call volume. Between 2014 and 2015, the average number of monthly client contacts (phone calls, emails, in-person meetings, etc.) increased from 611 to 2,471 — a fourfold increase. And the average number of monthly client contacts continued to rise to a peak of 3,175 in 2018. The significant decrease in contacts in 2020 may be due to two positive outcomes of the COVID-19 pandemic: 1) Link staff have heard, anecdotally, that people’s natural supports are being more generous with their help and support during this time, especially for families with children who need a place to do virtual learning, and 2) with the eviction moratorium and rental assistance in place, households have not been reaching out to the Link for prevention assistance at the same rate as in prior years.

FIGURE 1: Average Monthly Client Contacts with Allegheny Link, 2013 through 2020
Due mostly to the increased volume in calls to the Link, callers frequently had long waits to speak to a service coordinator. DHS quickly moved to hire more staff, eventually reaching a total of 20. The hiring of additional service coordinators has helped to reduce the length of wait time for callers over the years, from a high of nearly twenty minutes in 2016 to under two minutes in 2020 (Table 1).

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<thead>
<tr>
<th>YEAR</th>
<th>AVERAGE WAIT TIME (MINUTES)</th>
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<tr>
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<td>2017</td>
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<td>2019</td>
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The Link also struggled with another feature of the emergency housing system: demand almost always exceeds supply. Although introducing CE did not create this mismatch between supply and demand, it did make the problem much more obvious to DHS staff. Link service coordinators, generally with backgrounds in social work or similar training, had to learn how to say no—or suggest alternative solutions—for people the housing programs couldn’t serve. This did not come easily. Instead, they started out putting callers on a waiting list, even if they would almost certainly never be served.

As a result, within a few months the system was overrun. The waiting list eventually reached 2,500, a number that far exceeds the total number of people experiencing homelessness in the County. And only about 5% of those who called the Link were ultimately enrolled into a program.

Andrea Bustos, administrator of resource navigation and community supports, told of one man who called the Link because his grandmother was threatening to kick him out of the house for not washing the dishes. “Those were the kind of situations that led to us putting people on the list,” she said. “We were not giving them a chance to resolve their situation. Instead, we were offering them service without helping them fix their problem.” In fact, the client who had called the Link during the squabble with his grandmother was eventually offered housing but by then, he had agreed to do the dishes and all was well, and he declined the offer.
The overly broad application criteria and the first-come, first-served policy that DHS used in the early months of CE quickly created another problem: when someone’s turn finally came up, often their life situation or contact information had changed. Frequently, providers with an open housing slot had to call as many as 20 people from the top of the waiting list before finding a taker. One bridge housing1 program saw its occupancy rate drop from 90% to 33% due to the delays in identifying suitable candidates from the waiting list.

Although HUD’s definition of literal homelessness permits agencies to serve people at “imminent risk” of homelessness, DHS discovered that many people who may feel they are at risk, due to trouble making rent payments or family conflicts, actually resolve the situation on their own. In late 2015, DHS shifted from accepting clients in imminent risk (who were referred to other supports such as eviction prevention programs and for whom the door was open should they need to reapply) to placing on the list only those who met one of the four categories outlined in HUD’s definition:

1) Individuals or families who lack a fixed, regular and adequate nighttime residence (for example, individuals living in a place not meant for human habitation, staying in an emergency shelter or transitional housing, or exiting an institution like a jail or mental health treatment facility).

2) Individuals or families who will imminently lose their primary nighttime residence within 14 days and do not have the means to identify a subsequent residence.

3) Unaccompanied youth under age 25, or families with children/youth, who have faced persistent housing instability or who qualify as homeless under various federal statutes.

4) Individuals or families fleeing domestic violence, lacking another residence, and who do not have the means to identify other permanent housing.

IMPROVING SCREENING AND PRIORITIZATION

Recognizing the need for a valid screening and prioritization tool to replace first-come, first-served, DHS did extensive due diligence, inquiring as to what agencies in other locations were doing and evaluating various tools. It eventually settled on the VI-SPDAT (Vulnerability Index—Service Prioritization Decision Assistance Tool), which appeared to be delivering the best results and which also differentiated between single adults, unaccompanied transition-aged youth2 and families in the assessment process. DHS implemented the VI-SPDAT in January 2016, and for several years, it served its function well. However, it wasn’t long before a new inequity became apparent.

There are two categories of more permanent housing: permanent supportive housing (PSH), generally for vulnerable populations such as people with disabilities or mental health issues, and rapid rehousing (RRH), designed to serve as a short-term bridge to housing stability for clients with less intensive needs. Both fall under

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1 Bridge housing is a program designed to provide housing and appropriate supportive services to people experiencing homelessness to facilitate movement to independent living within a reasonable amount of time, usually less than 24 months. People utilizing bridge/transitional housing are considered to be homeless.

2 Transition-aged youth are young people in their late teens or early twenties who are transitioning out of youth-serving systems such as the child welfare system.
the Housing First philosophy, in which housing is considered a basic necessity that should be available regardless of a client’s readiness to address issues that might have contributed to their housing crisis (e.g., substance use, mental health issues). It doesn’t mean that they aren’t provided services before they find their housing, but they aren’t required to participate in non-housing services or achieve a level of functioning before they can be housed. In practice, it means that providers assist clients to obtain permanent housing so that they achieve the stability and the safety they need to work on other challenges.

“Before Housing First, we often expected people to jump through hoops if they wanted services,” Gabe Krivosh, head of the DHS Field Unit, commented, “but everyone has a right to safe and adequate housing. If we agree to that, then we should eliminate the requirement for them to prove anything. I don’t expect someone to suddenly have an epiphany and go for mental health treatment while they’re experiencing a housing crisis and having to scramble for every meal.”

The VI-SPDAT was used to determine whether applicants were more appropriate for PSH or RRH, but the division into two distinct groups, assigning a client to one or the other depending upon need, often unintentionally resulted in a situation in which a client with higher needs might lose out on a spot to someone with lower needs. In other words, some people with very high needs were put onto the PSH list (with fewer spots available) and waited while others with lower needs were placed on the RRH list, which had more available spots, and were therefore placed sooner. This is illustrated in Figure 2, which shows that families with scores from 9–12 were less likely to be placed than families with a score of 8, even though they had greater needs. This phenomenon, which is referred to as “the black hole,” also held true for individuals.
To address the black hole phenomenon, in late 2018 DHS implemented Dynamic Prioritization, a prioritization process in which all available housing resources are flexibly and quickly offered to individuals and families experiencing homelessness. Dynamic Prioritization essentially creates overlap of eligibility for RRH and PSH and is intended to ensure that the most vulnerable receive priority for some level of immediate (or quick) support rather than being left on a waiting list for a higher intensity intervention that may never be available. Figure 3 shows the impact of this change on families. Families with a score of 9 through 12, who previously were eligible for PSH only, became eligible for both PSH and RRH housing types. As a result, families with scores of 9 through 12 were more likely to be placed than they had been previously. The prioritization process also led to changes in the percentage of families with scores below 9 who received housing placements. Under the previous placement process, 48% of families who scored an 8 were placed in housing; after the change, the percentage was 17%. The impact was similar for individuals.
UNHAPPY PROVIDERS

Wasting time calling people on the waiting list who could not be contacted or who no longer needed services was not the only reason for the considerable unrest that developed among DHS’s contracted housing providers. Prior to implementation of CE, DHS could not monitor how service providers were deciding who would get in. That decision was left up to the provider unless a dissatisfied client complained to DHS. With the new system, determining who to serve was no longer at the discretion of the provider.

DHS held some contentious meetings with providers, who were divided in their response. Some were already used to accepting clients regardless of their criminal, behavioral health, or drug and alcohol records. But many were reluctant to transition from selecting clients to having to serve anyone referred to them. Some did not feel they were equipped to serve both men and women; others didn’t want to allow teenage boys into a shelter with their families; still others were adamantly opposed to housing sex offenders. And some providers feared that if they couldn’t select their clients, outcomes would decline and they would lose funding. Yet HUD required that all be served.
“Initially, it was like the Wild West,” said Diana Reichenbach, Goodwill’s director of supportive housing, of the new referral system. “You never knew what referrals you were going to get, such as folks with serious open criminal charges and active bench warrants or who had been living on the streets for 15 years. It was challenging to work with the CE staff to determine appropriate referrals, and we were ill-prepared to address some of these challenges. But eventually we said this is who we are working with now, and we looked for staff training on how to best serve these populations.”

The Link worked hard to help providers deal with the complex issues that came with new populations, such as determining whether a client with open criminal charges had a reasonable chance of resolving them without jail time. To serve a more challenging client mix, many staff required additional training and support, and DHS made a concerted effort to provide this training, as well as technical assistance and help developing new policies to address the new structure. However, most providers were supportive of the CE system’s role in putting an end to cherry-picking.

A MORE EFFICIENT MATCHING AND REFERRAL PROCESS

If this series of problems gives the impression that DHS was performing poorly relative to its peers, that would be a false impression. On the contrary, while other cities were struggling to change their systems, DHS’s quick and determined efforts to implement CE earned the county bonus money from HUD through its annual competitive grant process.

In early 2016, DHS asked HUD for technical assistance to review its work thus far and provide additional ideas. HUD responded by assigning a familiar and well-respected housing expert: Michael Lindsay, who had spent 11 years at DHS before joining ICF International, a national technical assistance provider. Lindsay conducted two focus groups in May 2016: one with DHS program administrators and Link staff and the other with providers. In general, he found that Allegheny County was experiencing “the same mess that was happening in a lot of other communities as an unintended result of coordinated entry.”

Lindsay applauded the changes DHS had already made regarding the waiting list and assessments. He also confirmed HUD’s willingness to accept DHS’s plan to implement Dynamic Prioritization and to place higher-need, PSH-eligible clients in RRH temporarily until a PSH slot opened rather than giving them no housing support.

Lindsay’s primary suggestion was to establish an interim step in the referral process to reassess each client and confirm their eligibility and priority level before their name was given to a provider. To implement this suggestion, DHS hired a homelessness resource coordinator who contacts clients as they reach the top of the list. By being persistent—connecting with clients, reviewing their needs, explaining the potential vacancy—the coordinator ensures a smoother entry for clients and providers alike.

As the waitlist grew, DHS recognized that many people on the list were able to self-resolve their housing crisis and no longer needed services by the time they were next in line for a program. Since those individuals no longer needed support, they frequently failed to return phone calls or emails from the provider they had been assigned to. The time it took to follow up with people who had already self-resolved, remove them from the waitlist and
request a new referral just delayed service delivery for the individuals who couldn't self-resolve and kept available beds empty longer. To avoid this delay, and to ensure that those referred to housing programs are those most in need, DHS added a requirement that people on the waitlist must check in every 30 days to confirm their ongoing need for housing support. Those who do not check back in with the Link are not completely removed from the waitlist, but they go inactive until they make contact again.

DHS was initially concerned about unintentional harm to those moved off the waitlist who were still in need of services but had valid reasons for being unable to contact the Link within 30 days. However, an analysis of waitlist data has shown that very few individuals moved to inactive ever call back with continued need. The process in place seems to be very effective at identifying and moving up those most in need.

An additional benefit from enhanced curation of the waitlist is that its size has steadily decreased from nearly 1,000 households in early 2017 to around 300 in late 2020. The number of people moved to the inactive list has also declined from an average of 201 households in 2017 to an average of 84 households in 2020.

DHS was careful to not remove from the list those who would likely continue to need services, and carefully tracked the data to make sure that the new process wasn't having a greater-than-expected impact or disproportionately affecting any particular population. With these measures in place, only a small percentage (5%) of those who were assessed and placed on the waitlist without being enrolled in a housing program were reassessed and received new referrals in the future. This indicates that the process is working extraordinarily well; DHS will continue to track these data to ensure continued fairness.

THE STRUGGLE TO STREAMLINE ACCESS TO EMERGENCY SHELTERS

Whether or not to incorporate emergency shelters into the CE system (in place of a daily line up, first-come, first-served method at each shelter) was a decision that required some time to make. Emergency shelters were initially included in CE, but the process was causing shelter beds to go unfilled, because when a shelter had an opening, it often took two or three days to locate the person at the top of the shelter wait list. The solution to this challenge proved to be multi-faceted.

For families seeking shelter, the Link takes an intensive case management approach to the problem. To prevent any family with children from ending up on the street, Link staff first work with them to try and find alternatives to entering the homelessness system. This emphasis on diversion — mediating with a landlord or talking to a relative who can assist — helps most families avoid shelter stays all together. For those families unable to find

3 DHS data from 2016 through 2018
other solutions, the Link provides a warm hand-off to a family emergency shelter. This process generally keeps family shelters at capacity while making sure families’ housing needs are addressed.

For individuals with more complex needs, often those with long histories of experiencing homelessness and living unsheltered, the Link initiated a case conferencing process to match them with a subset of emergency shelter beds that best meet their needs. Generally, these are the shelters with single room occupancy, rather than congregate sleeping spaces, that are more appealing to those long accustomed to living outside on their own. Individuals are selected for these spots by the street outreach workers who know them best and are aware when an individual may be ready to move off the streets.

For the remaining emergency shelters for single adults, DHS decided to try removing access to these beds from the CE process in the hope of removing the delay in filling beds. “There were pros and cons” to this reversal, explained Abigail Horn, DHS deputy director for the Office of Community Services. “Now we are not artificially creating empty beds by requiring shelters to serve the person at the top of our list, but we are back to the situation where a shelter for single people could conceivably decide whom they want or don’t want to serve. Also, many shelters have returned to the practice of requiring people to line up or call at a certain time each day to request a bed. Under coordinated entry, we had tried to create a more humane process of accessing shelter beds.” However, as Lindsay pointed out, “A coordinated entry system should not interfere with access to nightly shelter. People should still have a door they can walk up to if they need a bed that night.”

When DHS removed most emergency shelter programs for single individuals from CE in March 2017, it found that their bed utilization increased significantly. The average daily utilization of emergency shelter beds for singles was 96% during the first six months following this policy change, compared to just 80% during the same six-month time period in the year prior.

Client feedback also supported the change. Focus groups conducted while DHS was assessing the change indicated that just 10% of clients found the process of going to shelters directly, rather than through the Link, to be “hard.” As shown in Figure 4, direct access to shelters was reported by clients to be dramatically easier than going through the Link.
However, even though utilization and client satisfaction have increased, DHS has not given up on the idea of CE for shelters and continues to monitor and evaluate the system for opportunities for improvement.

MEETING PEOPLE WHERE THEY ARE
Some of the most challenging people to serve in the emergency housing sector — those living unsheltered in locations not meant for habitation — are also the hardest to reach. They’re not likely to phone the Link or fill out paperwork. To serve them well, they must be found first — and a relationship of trust must be built.

Realizing that to reach the most vulnerable clients, it needed CE staff out in the community and not just answering the phone, DHS created a field services coordination program (the Field Unit) which combines street outreach, case management and a mobile means of assessing prospective clients for CE.

The Field Unit first aims to build trust and rapport with clients, often starting by simply offering items like cold water on a hot day. The intent is to develop a relationship in which the individual eventually trusts enough to reach out for help when necessary. Since implementation, the Field Unit has grown from one staff person to seven and has become an invaluable complement to the placement process. Because its staff can often find individuals out on the streets that the office staff is struggling to reach by phone, the Field Unit is frequently asked to find those for whom CE has a program referral.
IMPROVED PROVIDER RELATIONSHIPS

Among the providers who have greatly appreciated the upgrades is the Veterans Leadership Program (VLP), which operates nine housing programs. In fact, VLP has even implemented DHS’s intake and assessment processes for its sites that are not HUD-funded and thus not required to use CE.

“Provider autonomy cannot override providing the best care for an individual's need,” said Christine Pietryga, VLP chief operating officer.

“I think coordinated entry has balanced the two, because now, when we do assessments, we are actually assessing need.”

VLP’s specific focus on the veteran population made the onset of CE less onerous than for programs without a designated focus. Consistent with HUD guidelines, VLP’s contract with DHS indicates a willingness to accept any referral, but because of the many veterans needing housing support, VLP has not accepted a non-veteran into its housing program for five years.

Alle-Kiski Hope, which operates a housing program for victims of domestic violence, has had a similarly positive experience. “If I disagree with an assessment result, I have always received a positive response about redoing the assessment,” said Erin Gillette, who manages housing services for Alle-Kiski Hope. “Sometimes people think they have to make their situation sound better than it is, whereas reassessment can help to show that someone is eligible.”

PREDICTING HOMELESSNESS: MOVING BEYOND SELF-REPORT ASSESSMENTS

The quest to provide the most accurate and effective CE process continues. The most recent program improvement involves a sticky aspect of the assessment process: since it relies on self-reported answers, accuracy is often uncertain. As Erin Gillette (Alle-Kiski Hope) noted above, many clients are less than forthright about their drug or behavioral health histories or criminal justice system involvement, thinking that honesty may disqualify them from eligibility whereas in reality it would be more likely to raise their score and place them higher on the waitlist. Others may exaggerate their problems, hoping that expressing a sense of urgency may get quicker attention, and end up in a level of programming that is unnecessary.

But why ask all these questions when, if a client has received human services in Allegheny County, much of the information is already in the Allegheny County data warehouse?4 Data back up the concern that self-reported answers with the VI-SPDAT do not always reflect a client’s true history. An analysis of individuals assessed by the Link found that only 75% (257) of the 342 people who had spent one or more nights in the County jail in the previous six months reported a jail stay during the same time period.

4 The Allegheny County Data Warehouse brings together and integrates client and service data from a wide variety of sources both internal and external to the County.
To circumvent unreliable client answers — and to limit the number of times clients have to repeat personal and potentially embarrassing information — DHS has begun to use predictive risk modeling (PRM), an innovative approach that uses information directly from the data warehouse to predict which callers are most at risk for negative outcomes if they are not housed. The Centre for Social Data Analytics at Auckland University of Technology in New Zealand, which did the research underlying a predictive risk modeling tool in DHS’s child welfare system, constructed a similar model for risk of homelessness. Because of the relative infrequency of homelessness, a statistically reliable model predicting that outcome directly was not possible. Instead, after reviewing hundreds of possible variables, the Centre developed a model predicting the risk of three adverse events should an individual remain without stable housing for the next 12 months:

- A mental health inpatient stay
- A jail booking
- Four or more visits to hospital emergency rooms

The resulting program is called the Allegheny Housing Assessment (AHA) tool. In September 2020, DHS began using the AHA in place of the VI-SPDAT with those clients for whom sufficient information was available in its data warehouse. DHS plans to issue a solicitation for an evaluation of the AHA in 2021 and will use the results of that evaluation to further refine the system.

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The CE system is a work in progress. As each improvement has been implemented, DHS has identified remaining or resulting issues and addressed them with a new policy, process or tool. The following flowchart was created to clearly illustrate the process of improvement to date.

DHS intends to continue its improvement efforts, including ongoing monitoring of the waiting list and revisiting the appropriateness of including emergency shelter in the CE process. We anticipate there will likely be further modifications needed in response to future reviews of system performance and outcomes. If other jurisdictions are interested in greater detail about the process described in this report and/or the current CE system, they are encouraged to contact DHS at DHS-Research@alleghenycounty.us.