FREQUENT UTILIZERS OF SERVICES IN ALLEGHENY COUNTY:
Criminal Justice System Involvement

This series of reports explores the group of people who use crisis services frequently. By looking more closely at this population of frequent utilizers, the Allegheny County Department of Human Services hopes to gain insight into their needs, identify key intervention points, and find ways to encourage long-term wellness while reducing the need for repeat intense service usage.

> **Frequent utilizer:** For the purposes of this report series, frequent utilizers are defined as those clients of a particular service system who accounted for roughly the top five percent of individuals using that service in the 2016–2017 period of analysis.

INTRODUCTION

In Allegheny County, the criminal justice system is designed to support and protect the public through the application of criminal justice laws and statutes. This includes investigating and prosecuting crimes, administering both punitive and rehabilitative services for convicted offenders, and providing supportive services for victims. This report focuses on two activities within this system through the lens of frequent and non-frequent utilizers: criminal filings and jail bookings. By understanding and addressing the needs of individuals who frequently use these two systems, the hope is that stakeholders can work towards identifying and implementing interventions that can reduce the frequency of these individuals' interactions with these systems. It should be noted that while criminal filings and jail bookings are distinct activities, both are inherently linked as individuals cannot generally be booked into a jail without an associated criminal filing; therefore, many people cross over and exist in both the criminal filing and jail booking analyses. For this reason, although the criminal filing and jail booking analyses were conducted separately, both have been integrated into a single report and presented alongside each other here.

METHODOLOGY

The period between January 1, 2016, and December 31, 2017, was used to identify individuals with at least one criminal filing and/or jail booking. A criminal filing is any criminal case filed in the Magisterial District Courts in which an individual is labeled as a defendant. These cases can stem from lower-level crimes like summary offenses and misdemeanors, as well as more serious crimes like felony person and homicide crimes. Criminal filings in which the defendant was ultimately found not guilty, cases in which the charges were later dropped, and cases that were ultimately transferred to non-criminal courts were retained in this analysis. Criminal filing information was obtained directly from the Commonwealth of Pennsylvania's Magisterial District Judge System.

A jail booking occurs when an individual is admitted to and incarcerated at the Allegheny County Jail, or at an alternative housing location, by formal legal document and the authority of the courts or another official agency. The Allegheny County Jail is a locally operated, short-term facility that holds individuals awaiting trial or sentencing; those sentenced to a period of less than two years; those who have violated the terms of a county or state probation sentence; and those being detained for other entities, including other counties, states, and the federal government, among other reasons. Jail booking data was obtained directly from the Allegheny County Jail's Offender Management System.
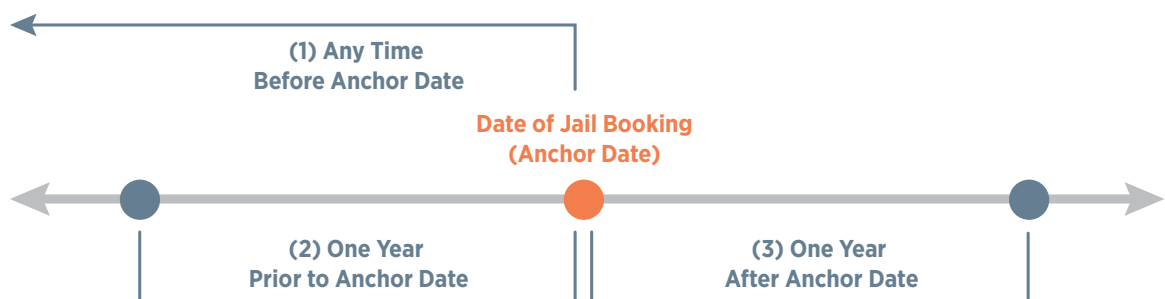
After identifying individuals who had at least one criminal filing or jail booking during the period of analysis, counts were then tallied at the person level within each system. These counts were used to classify a person as a frequent or non-frequent utilizer of that particular system.

In addition to analyzing the frequency of a person's interactions with the criminal justice system during the period of analysis, we explored the human service involvement of frequent and non-frequent utilizers. Using a person's first criminal filing or jail booking between 2016 and 2017 as an anchor date, we describe human services usage (1) ever before the anchor date (for which data is available); (2) one year before the anchor date; and (3) one year after the anchor date.[1] By identifying what services, if any, frequent utilizers engaged with either before or after their frequent utilization spell began, stakeholders can intervene at the point most effective for mitigating a crisis. Readers will also see that certain services are presented alongside corresponding age eligibility rates.

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[1]   For more information, see https://www.alleghenycountyanalytics.us/index.php/2018/08/13/allegheny-county-data-warehouse/

FIGURE 1: Involvement windows for people with a jail booking

DATA LIMITATIONS

The frequency metric is the total number of criminal filings or jail bookings in the two-year period from 2016 through 2017. This definition skews our results in one respect: for individuals whose first episode ever is in 2016 or 2017, the frequency metric counts the number of times they return to the system for a period of anywhere from zero days to two years following their first episode, depending on when their first episode is. For example, those whose first episode is January 1, 2016, are followed for two years. Those whose first episode is December 31, 2017, are followed for one day.

As a result of the two-year cohort methodology, the differences between the frequent and non-frequent utilizer groups are somewhat compressed: The non-frequent utilizer group as we define it is likely to contain some individuals who (1) would qualify as frequent utilizers if we followed them for two years, and (2) are demographically similar to the frequent utilizer group, so any demographic differences between the groups appear to be smaller than they actually are. This should be borne in mind in interpretating our results.

FINDINGS

Service Usage of Frequent and Non-Frequent Utilizers

During the two-year analysis period, there were 65,659 criminal filings associated with 41,788 unique individuals. For the purposes of this analysis, any person with four or more criminal filings during this time was classified as a frequent utilizer. A cutoff of four or more filings resulted in 6% (n=2,648) of the cohort being classified as a frequent utilizer and 94% (n=39,140) being classified as a non-frequent utilizer. Frequent utilizers were associated with 21% (n=13,875) of total criminal filings during this period, compared with non-frequent utilizers who were associated with 79% (n=51,674). Frequent utilizers had an average of 5.2 criminal filings, compared with an average of 1.3 criminal filings among non-frequent utilizers.

When looking at jail bookings during the same two-year benchmarking period, there were 30,132 total bookings associated with 20,040 unique individuals, with frequent utilizers defined as those having four or more bookings during this timeframe. A cutoff of four or more bookings led to 4% (n=863) of the cohort being classified as frequent utilizers and 96% (n=19,177) being classified as non-frequent utilizers. Frequent

utilizers were associated with 13% (n=3,970) of total bookings, compared with non-frequent utilizers who were associated with 87% (n=26,162). Frequent utilizers had an average of 4.6 jail bookings, compared with an average of 1.4 among non-frequent utilizers.

The choice to employ cutoffs that resulted in approximately 5% of the cohort being classified as frequent utilizers was used both to ensure standardization and facilitate comparability between the criminal filing and jail booking cohorts, as well as between those cohorts and others examined as part of the frequent utilizer series.

FIGURE 2: **Frequent utilizer cutoff analysis for criminal filings and jail bookings cohorts**

Criminal Filings (n = 41,788)
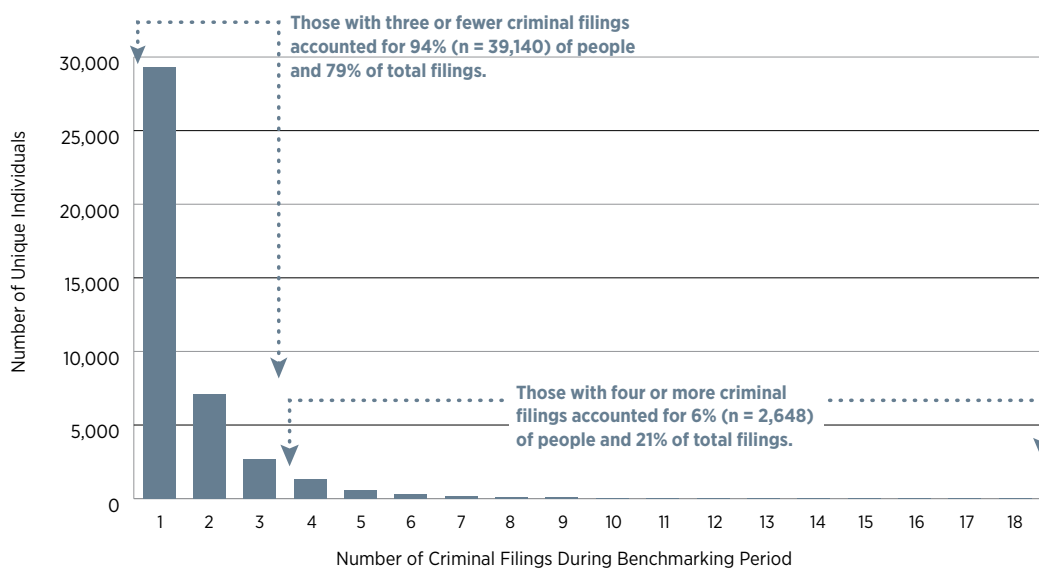
Jail Bookings (n = 20,040)
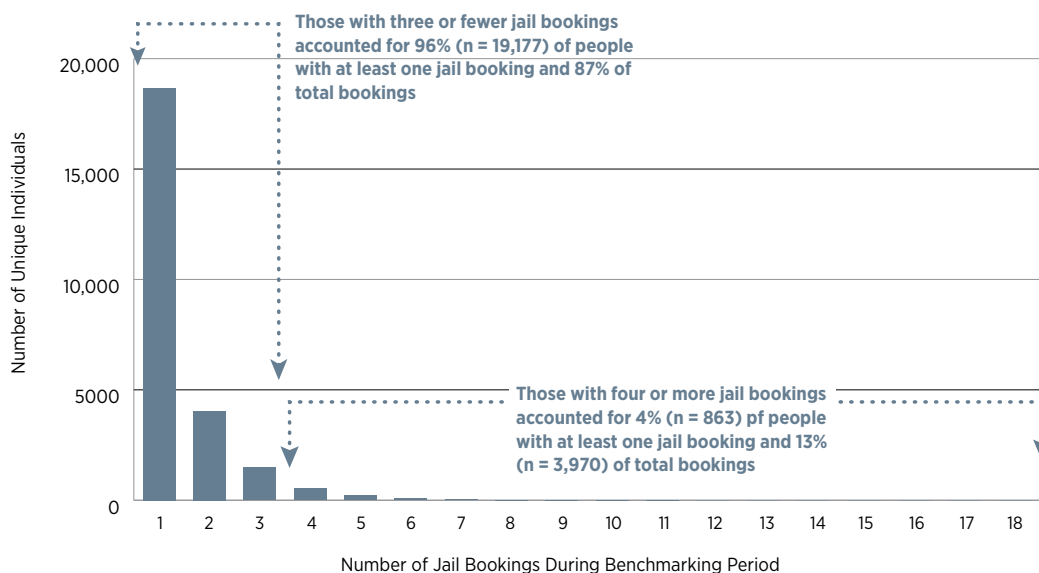
Demographics

Table 1 presents demographic information for both the criminal filing and jail booking cohorts, segmented by frequent and non-frequent utilizers. As shown, individuals in the criminal filings and jail booking cohorts are overwhelmingly male, with 74% of those in the criminal filings cohort and 76% in the jail bookings cohort being male. When comparing non-frequent utilizers across both cohorts, those in the criminal filings cohort are more likely to be female (31%) than in the jail bookings cohort (22%). When looking at people with a known race, individuals in the criminal filing cohort are more likely to be White among both frequent utilizers (+8%) and non-frequent utilizers (+12%). By contrast, individuals in the jail bookings cohort are about as equally likely to be White as they are to be Black in both the frequent (+2%) and non-frequent utilizer (+0%) groups. The distribution of age in both the criminal filing and jail booking cohorts skewed younger across both frequent and non-frequent utilizers: 30% of frequent utilizers in the criminal filings cohort were under the age of 25, compared with 25% of frequent utilizers in the jail booking cohort.

TABLE 1: **Gender, race and age of people who had a criminal filing or jail booking, frequent vs. non-frequent utilizers, 2016–2017**

	CRIMINAL FILINGS COHORT		JAIL BOOKING COHORT	
	FREQUENT UTILIZERS (N = 2,648)	**NON-FREQUENT UTILIZERS (N = 39,140)**	**FREQUENT UTILIZERS (N = 863)**	**NON-FREQUENT UTILIZERS (N = 19,177)**
Gender*				
Female	26%	31%	24%	22%
Male	74%	69%	76%	78%
Race**				
Black	46%	43%	49%	49%
White	54%	55%	51%	50%
Age Range				
Under 18	0%	1%	0%	1%
18–24	30%	24%	25%	19%
25–34	36%	34%	36%	38%
35–44	19%	19%	20%	21%
45–54	11%	13%	13%	14%
55–64	3%	7%	4%	6%
Over 64	1%	2%	1%	1%

* 55 people with criminal filings and 16 people with jail bookings did not have a documented gender.

** 769 people with criminal filings and 32 people with jail bookings did not have a documented race.

CRIMINAL JUSTICE SYSTEM INVOLVEMENT

Criminal Filings: In the one year prior to a person's first criminal filing during the period of analysis, 30% of frequent utilizers had either a criminal filing or a jail booking. This rate is approximately half of that during the ever before period, where 80% of frequent utilizers had a prior criminal filing and 66% had a prior jail booking. One possible explanation for this large difference is that frequent utilizers may have had some sort of a triggering event at some point during 2016 and 2017, which would explain a large number of subsequent criminal filings. By contrast, non-frequent utilizers in this group had much lower rates of prior criminal filings (7%) and jail bookings (9%) in the one-year-before period. However, like frequent utilizers, their long-term prior involvement rates were significantly higher: 56% of non-frequent utilizers had at least one prior criminal filing at any point before, and 40% had a prior jail booking. In the one-year-after period, frequent utilizers showed high rates of subsequent criminal filings (88%) and jail bookings (73%), although the high rate of subsequent criminal filings is to be expected as new filings are de facto required to be classified as frequent utilizers. The commensurate high rate of subsequent of jail bookings is also not particularly surprising, as judges are much more likely to sentence repeat offenders to jail time rather than community-based punishments.

TABLE 2: Criminal justice system involvement for criminal filing cohort

INVOLVEMENT	PROGRAM AREA	FREQUENT UTILIZERS (N = 2,648)		NON-FREQUENT UTILIZERS (N = 39,140)	
		SERVICE RATE	ELIGIBLE POPULATION	SERVICE RATE	ELIGIBLE POPULATION
Ever Before Anchor Date	Criminal Filing	80%	—	56%	—
	Booking	66%	2,590 (98%)	40%	38,418 (98%)
One Year Before Anchor Date	Criminal Filing	30%	—	7%	—
	Booking	30%	2,590 (98%)	9%	38,418 (98%)
One Year After Anchor Date	Criminal Filing	88%	—	23%	—
	Booking	73%	2,599 (98%)	27%	38,560 (99%)

Bookings: For individuals in the jail booking cohort, 81% had a criminal filing and 45% had a jail booking in the one year prior to their first jail booking. By contrast, 62% of non-frequent utilizers had a prior criminal filing and 16% had a prior jail booking. One likely explanation for the high rate of prior criminal filings among both frequent and non-frequent cohorts is that these filings could be related to the subsequent booking itself. In the one-year-after period, 76% of frequent utilizers had a new criminal filing, while 97% had a subsequent booking. The fact that the subsequent booking number is more than 21 percentage points higher than the new criminal filings figure could indicate that subsequent bookings may be related to ongoing criminal cases, probation violations, or external detainers for other agencies, rather than new criminal activity. Non-frequent utilizers had much lower rates of criminal justice system involvement in the one-year-after period: 27% had a subsequent criminal filing and 33% had a subsequent jail booking, which points to these individuals as being one-off, rather than habitual offenders.

TABLE 3: Criminal justice system involvement for jail booking cohort

INVOLVEMENT	PROGRAM AREA	FREQUENT UTILIZERS (N =863)		NON-FREQUENT UTILIZERS (N = 19,177)	
		SERVICE RATE	ELIGIBLE	SERVICE RATE	ELIGIBLE
Ever Before Anchor Date	Criminal Filing	96%	—	91%	—
	Booking	82%	859 (100%)	64%	18,970 (99%)
One Year Before Anchor Date	Criminal Filing	81%	—	62%	—
	Booking	45%	859 (100%)	16%	18,970 (99%)
One Year After Anchor Date	Criminal Filing	76%	—	27%	—
	Booking	97%	859 (100%)	33%	18,970 (99%)

OTHER SYSTEM INVOLVEMENT BEFORE AND AFTER CRIMINAL JUSTICE CONTACT

Analysis also explored involvement with other systems of people who had a criminal filing and/or jail booking. Key findings from this analytic review may suggest intervention points for prevention or reduction of criminal justice involvement.

Housing Services

Utilization rates for general housing supports were relatively low for both frequent and non-frequent utilizers in the criminal filings cohort and the jail bookings cohort. This could indicate that long-term housing needs for the majority of these populations are low, although further analysis would need to control for what proportion of individuals utilize emergency shelter services during these times.

TABLE 4: **Housing service involvement for people in the criminal filings cohort**

INVOLVEMENT	PROGRAM AREA	FREQUENT UTILIZERS (N =2,648) SERVICE RATE	NON-FREQUENT UTILIZERS (N = 39,140) SERVICE RATE
Ever Before Anchor Date	General Housing Supports	10%	5%
One Year Before Anchor Date	General Housing Supports	4%	2%
One Year After Anchor Date	General Housing Supports	4%	2%

TABLE 5: **Housing service involvement for people in the jail bookings cohort**

INVOLVEMENT	PROGRAM AREA	FREQUENT UTILIZERS (N =863) SERVICE RATE	NON-FREQUENT UTILIZERS (N = 19,177) SERVICE RATE
Ever Before Anchor Date	General Housing Supports	13%	8%
One Year Before Anchor Date	General Housing Supports	5%	3%
One Year After Anchor Date	General Housing Supports	2%	4%

Family-Related Services

The last group of services examined was family-related services, shown in **Tables 6 and 7.** These services include: (1) child welfare system (Office of Children, Youth and Families [CYF]) involvement as a parent; (2) child welfare system involvement as a child, and (3) juvenile probation involvement. Readers should note the eligibility rates for child welfare as a child and juvenile probation. Eligibility rates for these services/timeframes are extremely low as an individual must be 17 years of age or under to be eligible for these services. In both the criminal filing and jail booking cohorts, there are very small numbers of people in both the frequent and non-frequent utilizers groups that meet these criteria. This caveat does not apply to the ever-before timeframe, as that considers eligibility at any time previously, which close to 100% of the population meets.[2]

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2 The reason that these figures are not always 100% is that certain individuals, although previously eligible, were only eligible before data began being collected electronically and thus are omitted from the eligible population.

As shown, in both the criminal filing and jail booking cohorts, more than 50% of frequent utilizers in each cohort had prior involvement with juvenile probation at any point before their first criminal event during the period of analysis. This finding is not entirely surprising as there is a strong link between juvenile probation involvement as a child and future criminal justice system involvement as an adult. We see confirmation of this in that 60% of eligible frequent utilizers in the criminal filings frequent utilizer cohort and 89% of eligible frequent utilizers in the jail bookings cohort had prior juvenile probation involvement in the one-year-before period. During this same timeframe, we also see that eligible frequent utilizers had approximately 50% more involvement with child welfare as a child in both cohorts relative to non-frequent utilizers.

Also of note is that approximately 10% of frequent utilizers in the criminal filings cohort and 13% of frequent utilizers in the jail bookings cohort had involvement with child welfare as a parent in the one-year-prior timeframe, and that both rates increase by 3% between then and the one-year-after time period. One possible explanation for this increase is that criminal justice involvement exacerbated underlying familial issues, or that underlying familial issues prompted criminal activity. It should be noted that these rates do not control for the number of people who either have a child of their own or live in a home with a child. Controlling for those details would lead these rates to be higher and thus, the results presented below can be seen as an involvement floor.

TABLE 6: **Family-related service involvement for people in the criminal filings cohort**

INVOLVEMENT	SUPPORT SERVICE PROGRAM AREA	FREQUENT UTILIZERS (N = 2,648)		NON-FREQUENT UTILIZERS (N = 39,140)	
		SERVICE RATE	ELIGIBLE	SERVICE RATE	ELIGIBLE
One Year Before Anchor Date	Child Welfare as a Child	17%	121 (5%)	10%	1,366 (3%)
	Child Welfare as a Parent	10%	2,601 (98%)	5%	38,659 (99%)
	Juvenile Justice	60%	121 (5%)	34%	1,355 (3%)
One Year After Anchor Date	Child Welfare as a Child	40%	5 (<1%)	11%	199 (1%)
	Child Welfare as a Parent	13%	2,601 (98%)	6%	38,659 (99%)
	Juvenile Justice	80%	5 (<1%)	75%	188 (<1%)

TABLE 7: Family-related service involvement for people in the jail bookings cohort

INVOLVEMENT	SUPPORT SERVICE PROGRAM AREA	FREQUENT UTILIZERS (N = 863)		NON-FREQUENT UTILIZERS (N = 19,177)	
		SERVICE RATE	ELIGIBLE	SERVICE RATE	ELIGIBLE
Ever Before Anchor Date	Child Welfare as a Child	19%	447 (52%)	13%	9,442 (49%)
	Child Welfare as a Parent	39%	863 (100%)	28%	19,135 (100%)
	Juvenile Justice	60%	303 (35%)	45%	6,150 (32%)
One Year Before Anchor Date	Child Welfare as a Child	32%	19 (2%)	18%	466 (2%)
	Child Welfare as a Parent	13%	863 (100%)	7%	19,135 (100%)
	Juvenile Justice	89%	19 (2%)	61%	463 (2%)
One Year After Anchor Date	Child Welfare as a Child	—	—	15%	131 (1%)
	Child Welfare as a Parent	16%	863 (100%)	9%	19,054 (99%)
	Juvenile Justice	—	—	88%	128 (1%)

Crisis Services

Emergency department services were by far the most utilized crisis service across both the criminal filing and jail booking cohorts (**Tables 8 and 9**). In the year prior to their first criminal filing during the baseline period, 42% of frequent utilizers visited the emergency room, compared with 26% of non-frequent utilizers. Likewise, in the year prior to their first jail booking, 47% of frequent utilizers visited the emergency department, compared with 32% of non-frequent utilizers.

Interestingly, in the one-year-after time period, the rate of emergency department visits increased for frequent utilizers in both the criminal filing and jail booking cohorts but remained constant for those in the non-frequent utilizer groups. This could indicate that frequent utilizers are facing additional medical needs during their period of frequent service use that are not present for non-frequent utilizers.

When looking at emergency shelter stays and mental health crisis service usage, we see that frequent utilizers engaged with these services at approximately twice the rate of non-frequent utilizers during the one-year-before and one-year-after timeframes. Interestingly, mental health crisis service involvement rates remain constant between the one-year-before and one-year-after timeframes for both the criminal filing (10%) and jail booking (14%) cohorts. While mental health crisis involvement rates remained constant, emergency shelter usage rates increased between these two periods for both groups. Between the one-year-before and one-year-after period, emergency shelter rates increased for frequent utilizers in the criminal filings cohort by 66% and in the jail bookings cohort by 40%, although baseline involvement rates remain low relative to other services examined.

TABLE 8: **Crisis service involvement of people in the criminal filings cohort**

INVOLVEMENT	SUPPORT SERVICE PROGRAM AREA	FREQUENT UTILIZERS (N = 2,648) SERVICE RATE	NON-FREQUENT UTILIZERS (N = 39,140) SERVICE RATE
Ever Before Anchor Date	Emergency Department	46%	31%
	Emergency Shelter	10%	5%
	Mental Health Crisis	30%	16%
One Year Before Anchor Date	Emergency Department	42%	26%
	Emergency Shelter	3%	1%
	Mental Health Crisis	10%	4%
One Year After Anchor Date	Emergency Department	48%	26%
	Emergency Shelter	5%	2%
	Mental Health Crisis	10%	4%

TABLE 9: **Crisis service involvement of people in the jail bookings cohort**

INVOLVEMENT	SUPPORT SERVICE PROGRAM AREA	FREQUENT UTILIZERS (N = 863) SERVICE RATE	NON-FREQUENT UTILIZERS (N = 19,177) SERVICE RATE
Ever Before Anchor Date	Emergency Department	51%	38%
	Emergency Shelter	16%	8%
	Mental Health Crisis	37%	23%
One Year Before Anchor Date	Emergency Department	47%	32%
	Emergency Shelter	5%	2%
	Mental Health Crisis	14%	7%
One Year After Anchor Date	Emergency Department	52%	32%
	Emergency Shelter	7%	3%
	Mental Health Crisis	14%	6%

Other Behavioral Health Services

Table 10 details the use of publicly funded drug and alcohol treatment and mental health services. At any point before the first criminal event during the analysis period, 65% of frequent utilizers in the criminal filings cohort and 74% of frequent utilizers in the jail booking cohort had previously used a mental health service, rates which are approximately 50% higher than those of non-frequent utilizers. These rates decreased by almost half during the one-year-prior timeframe to 32% for the frequent utilizers in the criminal filings cohort, and 38% for the frequent utilizers in the jail booking cohort, but then increased by over 10% in both cohorts during the one-year-after timeframe. One possible explanation for this pattern is that frequent utilizers in both groups were not getting the mental health support services they needed in the one year prior to the start of their frequent utilizer spell, and only began to receive them again after it started.

There is a similar pattern in terms of utilization rates of drug and alcohol support services by frequent utilizers, where rates dropped precipitously between ever-before and one-year-before periods, then increased by more than 10% between the one-year-before and one-year-after time periods. It is possible that these increases are linked: mental health needs may be exacerbated by substance use disorder and vice-versa.

TABLE 10: Drug and alcohol and mental health treatment involvement of people in the criminal filings cohort

INVOLVEMENT	SUPPORT SERVICE PROGRAM AREA	FREQUENT UTILIZERS (N = 2,648) SERVICE RATE	NON-FREQUENT UTILIZERS (N = 39,140) SERVICE RATE
Ever Before Anchor Date	Drug and Alcohol Treatment	57%	31%
	Mental Health Services	65%	42%
One Year Before Anchor Date	Drug and Alcohol Treatment	27%	11%
	Mental Health Services	32%	15%
One Year After Anchor Date	Drug and Alcohol Treatment	38%	15%
	Mental Health Services	43%	19%

TABLE 11: Drug and alcohol and mental health treatment involvement of people in the jail bookings cohort

INVOLVEMENT	SUPPORT SERVICE PROGRAM AREA	FREQUENT UTILIZERS (N = 863) SERVICE RATE	NON-FREQUENT UTILIZERS (N = 19,177) SERVICE RATE
Ever Before Anchor Date	Drug and Alcohol Treatment	64%	45%
	Mental Health Services	74%	55%
One Year Before Anchor Date	Drug and Alcohol Treatment	30%	18%
	Mental Health Services	38%	23%
One Year After Anchor Date	Drug and Alcohol Treatment	42%	23%
	Mental Health Services	50%	26%

DISCUSSION

The purpose of this analysis was to learn about individuals who frequently interact with two key areas of the criminal justice system: those who are the subject of criminal filings in the Magisterial District Courts and those booked at the Allegheny County Jail. By understanding these populations and the extent to which they interact with other human service areas, it is possible to design interventions which more effectively meet these people's needs, with the long-term goal of reducing their criminal justice involvement. It is important to describe and acknowledge the population of interest and respect the history and experiences that resulted in their frequent use of services. However, real intervention efforts to improve outcomes for service recipients comes from deeper analyses of those who are experiencing adverse outcomes and appropriately targeting the needs that are driving repeated interactions.