

Yellow Line Project Interim Descriptive Report

This document was created by MMB's Impact Evaluation Team for Blue Earth County's Department of Human Services and Social Services in preparation for an analysis of the Yellow Line Project studying its impacts on recidivism and health related outcomes. This report is an opportunity to share information on the implementation of Yellow Line.

We first establish a framework for understanding Yellow Line and how we might define components of its process including referrals, pathways, screenings, and the My Yellow Line Plan. We include descriptions of the project's target population and participants' demographic characteristics with interpretations from different perspectives. This descriptive report can serve as an assessment tool to identify trends and/or gaps that may not have been immediately obvious.

Background

The Yellow Line Project has operated in Blue Earth County since 2018. Yellow Line's aim is to intervene upstream during incidents that lead to law enforcement encounters involving residents with mental health or substance use problems. Many of these individuals might benefit more from treatment rather than jail time. By involving the county's department of human services earlier in the process, individuals can be connected to healthcare and other services to address their underlying health conditions or social needs that may be leading to repeated law enforcement encounters and incarcerations.

Before Yellow Line, law enforcement officers had limited options when they encountered individuals with behavioral health needs, such as jail, detox, or the emergency room. Often these individuals repeatedly found themselves in the same situation with law enforcement because they never received the appropriate care. In these cases, improved access to the appropriate healthcare would be more effective at helping them manage their condition, potentially preventing future interactions with law enforcement and incarceration.

Yellow Line originated from discussions between Blue Earth County's Human Services and the Sheriff's Office in 2015 to consider offering new options for the criminal justice-involved population. This first implementation model more closely resembled other diversion programs across the country, which typically focus on pre-trial interventions to avoid convictions and long-term repercussions of a criminal record. However, Yellow Line evolved to focus more on prevention and treatment instead of diversion, transitioning away from the diversion model of asking officers to hold charges. Since the program expanded from pre-booking alternatives, the pathways into Yellow Line have added street-level engagements and screenings offered to individuals already in jail a few days.

Program Description

The Yellow Line Project offers mental health and substance abuse screenings, as well as individualized care plans, to Minnesotans involved in criminal justice interactions related to mental health or chemical dependency problems and social, economic, or housing needs. Individuals that accept the offer to work with Yellow Line receive aid in connecting to needed services, such as medical treatment, public benefits, or other supports. The goal is to screen 100% of individuals with these potential concerns who are involved in incidents leading to law enforcement intervention. There are three primary pathways by which individuals can become involved with the Yellow Line Project: 1) street-level encounters with law enforcement, 2) pre-booking screenings that follow detainment but occur before confinement, and 3) screenings for individuals held on short-term jail stays (typically 1-3 days). The fourth pathway indicated below (*Detox*) refers to involvement of the Yellow Line Project following a stay at a county-run detox center. Though this was not originally conceived of as a distinct avenue for the Yellow Line Project during its implementation (many of the detox center referrals follow from street-level encounters), we have elected to consider this as a *pathway* because it occurs frequently and because of the important collaboration between Yellow Line and county detox centers.

After an individual is identified, regardless of the pathway, in most cases a law enforcement officer contacts one of the Yellow Line Project's Community Based Coordinators (CBC) to provide mental health and substance abuse screenings. If the individual is eligible and agrees to participate, the CBC provides initial recommendations for county and state social services that might assist them and initiates development of a My Yellow Line Plan. These care plans detail an individual's need for change, provide structure for the individual to set personal goals for treatment and recovery, and describe how the individual and the CBC will work to address identified needs over the next 60 days.¹

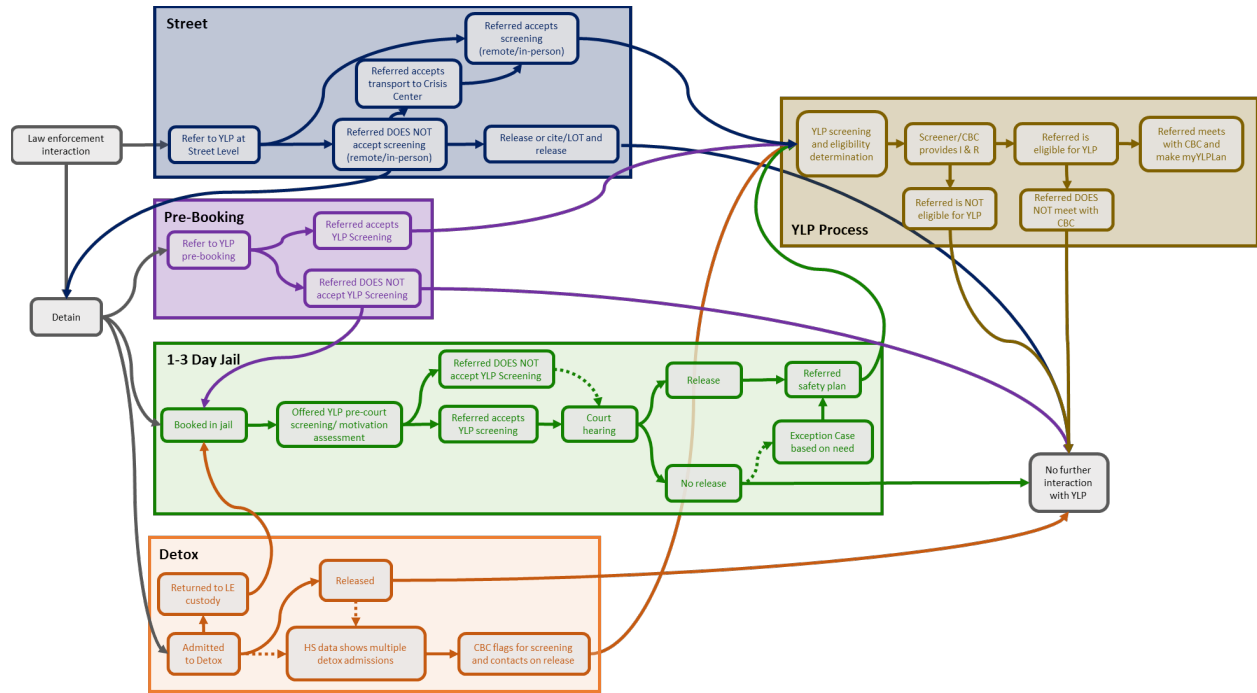
In addition to working with the individual directly through a CBC, Yellow Line conducts regular, biweekly care coordination meetings with its Collaborative Outreach Team (COT) – comprised of all the operational partners involved in the project to ensure individuals receive appropriate services. The team is co-chaired by Blue Earth County's Human Services and by law enforcement leads (Sheriff's Office and Mankato Police), reinforcing their partnership and aligned philosophies. The team also includes representatives from the County Attorney's Office, local hospital and mental health center, community corrections law enforcement dispatch, and local housing coordinator. They meet to discuss individual cases, perform multi-disciplinary reviews, and provide overall strategic direction.

When compared to pre-charge diversion programs, Yellow Line's aim is to intervene further upstream of the originating encounter and continue downstream engagement to address underlying causes and prevent recurring crises or criminal justice involvement. Notably, it does not actively divert charges and held charges are not tied to program participation for an individual. Law enforcement officers

¹ Occasionally, Yellow Line CBCs will also provide services to incarcerated individuals to facilitate their transitions to treatment or home after release, or assist with family or employment obligations that could be impacted by confinement.

independently decide whether a charge is appropriate and, regardless of whether they decide to charge, they can still help connect the individual to services through the CBC.

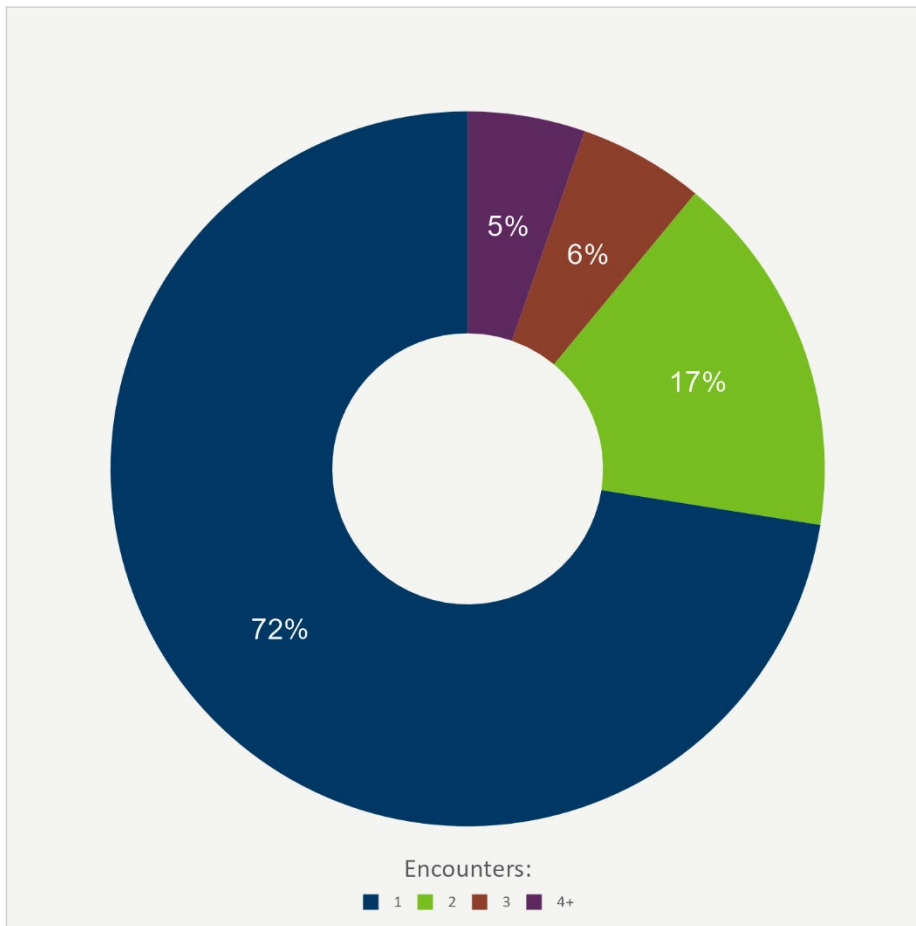
Figure 1. Yellow Line Project Pathways



This diagram depicts the pathways through which an individual can become involved with the Yellow Line Project. There are three primary pathways (Street-Level, Pre-Booking, and 1-3 Day Jail), with a fourth pathway (Detox) that has emerged organically over the life of the program.

The Yellow Line Project’s target population is individuals with mental health or substance use issues who become involved in law enforcement encounters. Yellow Line is primarily intended for individuals accused of low-level and non-violent crimes. The most obvious cases for Yellow Line’s services are individuals with repeated visits to detox or behavioral health hospitalizations, or those who have repeated encounters with law enforcement for similar low-level offenses. While the goal of the Yellow Line Project is to end the cycle of recidivism and crisis for an individual, individuals can interact with the program multiple times before outcomes are observed. Figure 2 shows the distribution of repeat Yellow Line Project encounters across individuals who had any encounters in 2019 and 2020. Roughly 1 in 4 had more than one engagement with Yellow Line during this period.

Figure 2. Proportion of Repeat Yellow Line Project Encounters



Proportions of individuals with known Yellow Line Project encounters that had 1, 2, 3, or 4 or more encounters with the program in 2019 and 2020.

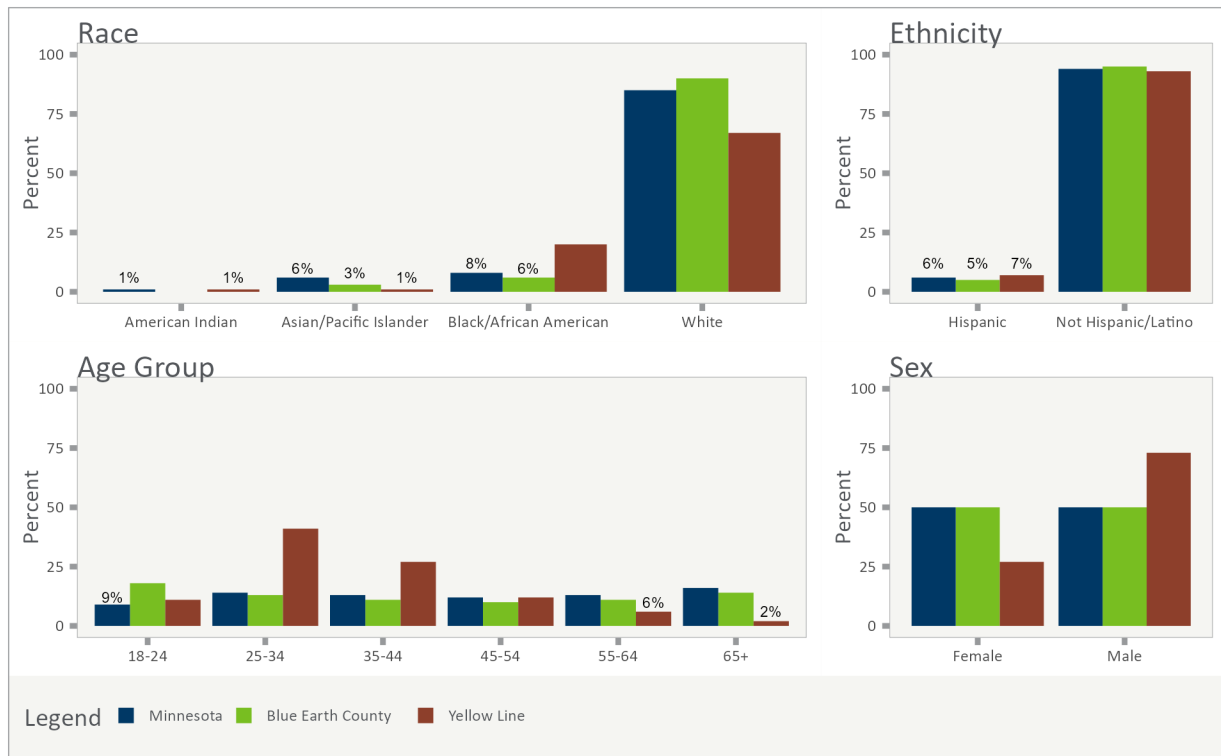
Yellow Line Implementation and Demographics

Blue Earth County’s population is approximately 70,000 people with a median income of \$60,000. These numbers are similar (?) to the Minnesota county averages of 66,000 population and \$64,000 median income. According to the U.S. Census in 2020, Blue Earth County is slightly less diverse and younger than the overall population of Minnesota with 83% of residents self-reporting as “White Alone” compared to 76% of Minnesota overall. Also, the county has a greater proportion of younger people with 22% of county residents between age 18 and 24 compared to 9% in all of Minnesota.

Figure 3 compares the demographic makeup of people living in Minnesota, people living in Blue Earth County, and people who were offered Yellow Line, in terms of race, ethnicity, age, and sex. Individuals who were offered Yellow Line were more likely to be Black or African American (approximately 20% of

program participants), and less likely to be White (approximately 70%), than the general population. Nearly 65% of the Yellow Line participants were between the ages of 25 and 44, whereas only 25% of the BEC and Minnesota populations fell in that age range. Almost three quarters of the Yellow Line population were male, compared to half of the general population. Ethnicity was similar across all three groups. In sum, Yellow Line participants were more likely to be younger, male, and African American than Minnesota and Blue Earth County’s broader populations.

Figure 3. Population Demographics



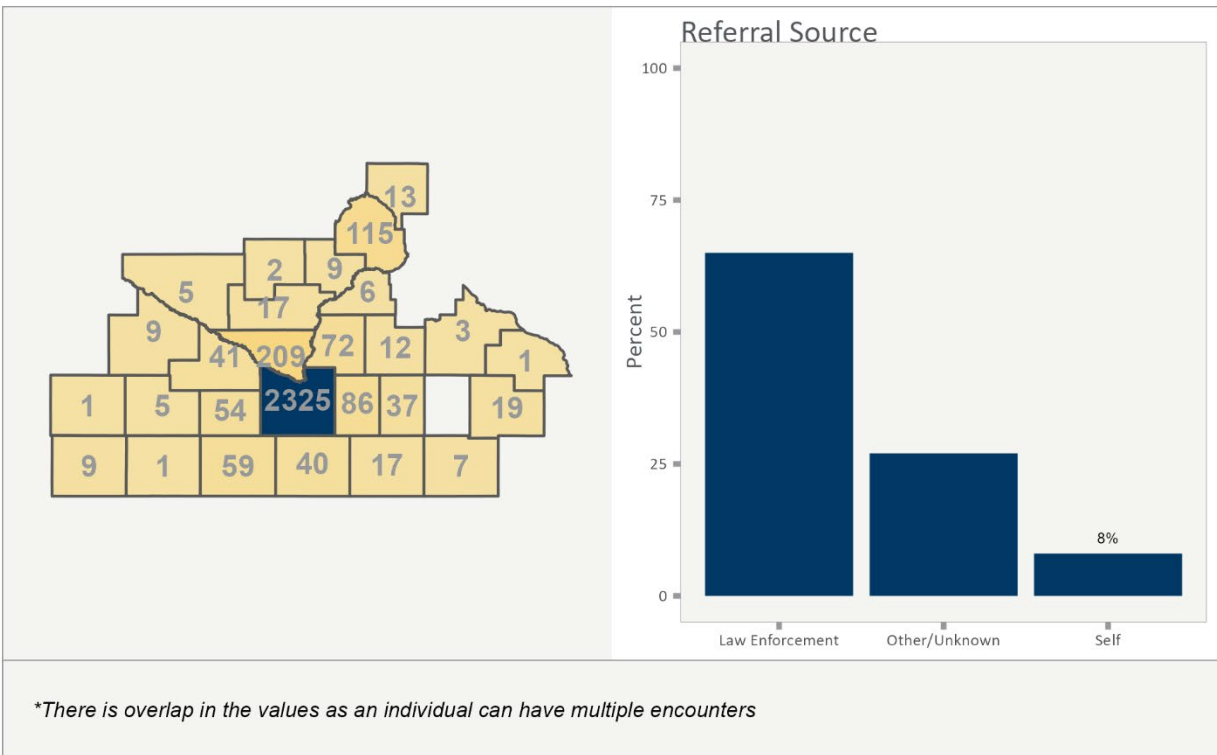
Distribution of race, ethnicity, age, and sex in Minnesota, Blue Earth County, and within the population that encountered Yellow Line in 2019 and 2020. Data for Minnesota and Blue Earth County comes from the 2020 U.S. Census. Individuals who listed more than one race are excluded from this figure.

Yellow Line Project Referrals

Yellow Line services can be offered to people who live in or out of Blue Earth County, so long as the referral to the program comes from within the Blue Earth County jurisdiction. Referrals to Yellow Line are usually made by a law enforcement officer involved in the encounter and can occur at different times or locations (which are generally classified as pathways below). The map in Figure 4 shows how many Yellow Line encounters were associated with individuals from various counties throughout Minnesota. It is clear that individuals outside Blue Earth County have the opportunity to experience impacts of the program, indicating an opportunity for a program like Yellow Line to have broader

implications for the State as a whole. The bar chart in Figure 4 indicates that most of the referrals to Yellow Line came through law enforcement, followed by other or unknown referral sources, and a small number of self-referrals. Referrals listed as *Other/Unknown* are referrals for which no referrer was indicated in administrative data or where the referrer was an uncommon means of involving Yellow Line².

Figure 4. Counties of Financial Responsibility for Yellow Line Project Encounters and Encounter Referral Sources



The map on the left shows the counties surrounding Blue Earth County (in blue) that are listed as the county of financial responsibility (COFR) for individuals involved in a Yellow Line encounter. The number in each county indicates the number of Yellow Line encounters that list the county as the individual's COFR. The figure on the right shows the frequency of referrals by key sources (Law Enforcement, Self, and Other/Unknown). There were a total of 3,466 known Yellow Line encounters in 2019 and 2020.

Demographic Pattern in Yellow Line Referrals

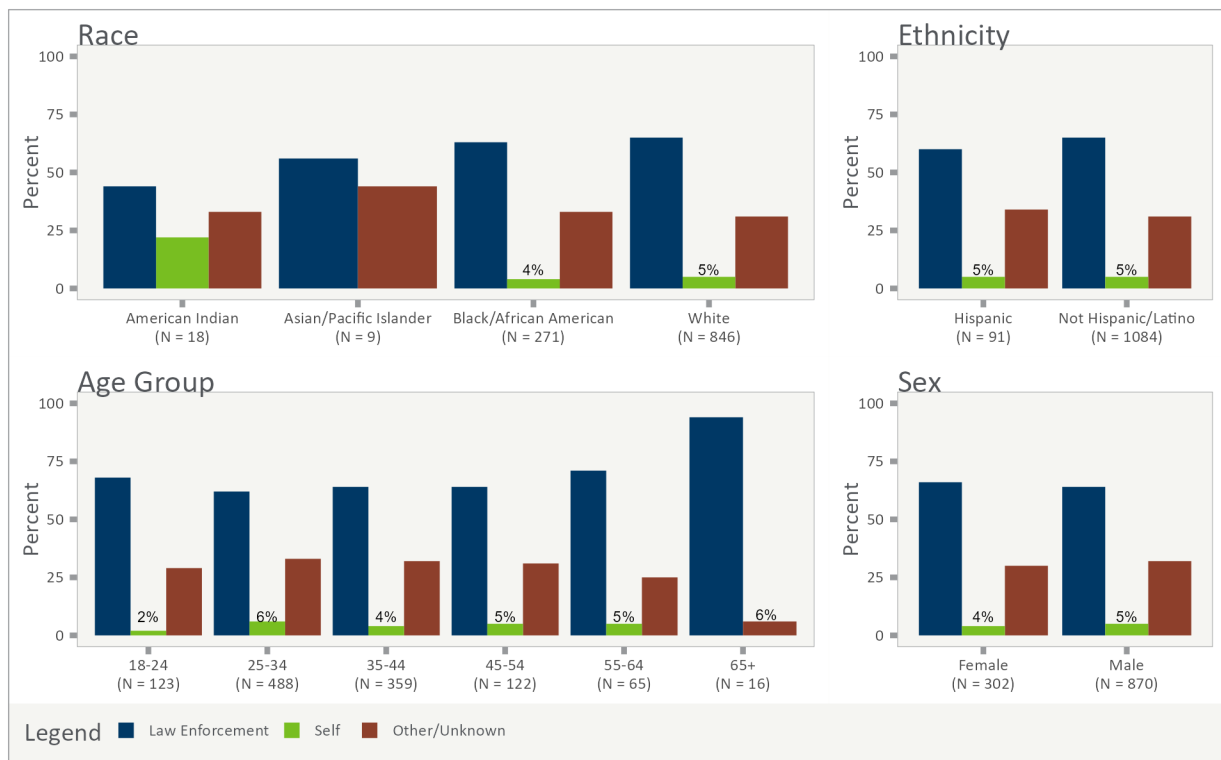
As discussed above, referrals to the Yellow Line Project primarily originate from law enforcement, but a small percentage come from self-referrals of individuals familiar with the program. Given the close

² Encounters classified as part of the *Detox* pathway have a state or county detox center listed as the referral source. However, as we elected to frame these encounters as belonging to a distinct pathway, we did not include these as referrals, instead using a secondary referral indicator to assign encounters to one of the above categories.

interaction that the program has with local law enforcement, the prevalence of law enforcement referrals is expected. However, self-referrals may indicate how aware residents of Blue Earth County (or the surrounding area) are of the program as a resource.

Figure 5 shows the demographic characteristics of individuals who were referred to the Yellow Line Project, separated by referral source. Across all race groups, the largest percentage of referrals came through law enforcement. A notable difference was in self-referrals; nearly 25% of American Indians self-referred to the program, compared to less than 10% for the other race groups. However, American Indians made up a very small portion of Yellow Line referrals overall, so this difference should be interpreted in the broader context. Referral sources showed similar patterns among Hispanic and non-Hispanic individuals, all age groups, and males and females.

Figure 5. Demographic Makeup of Yellow Line Project Referrals by Source



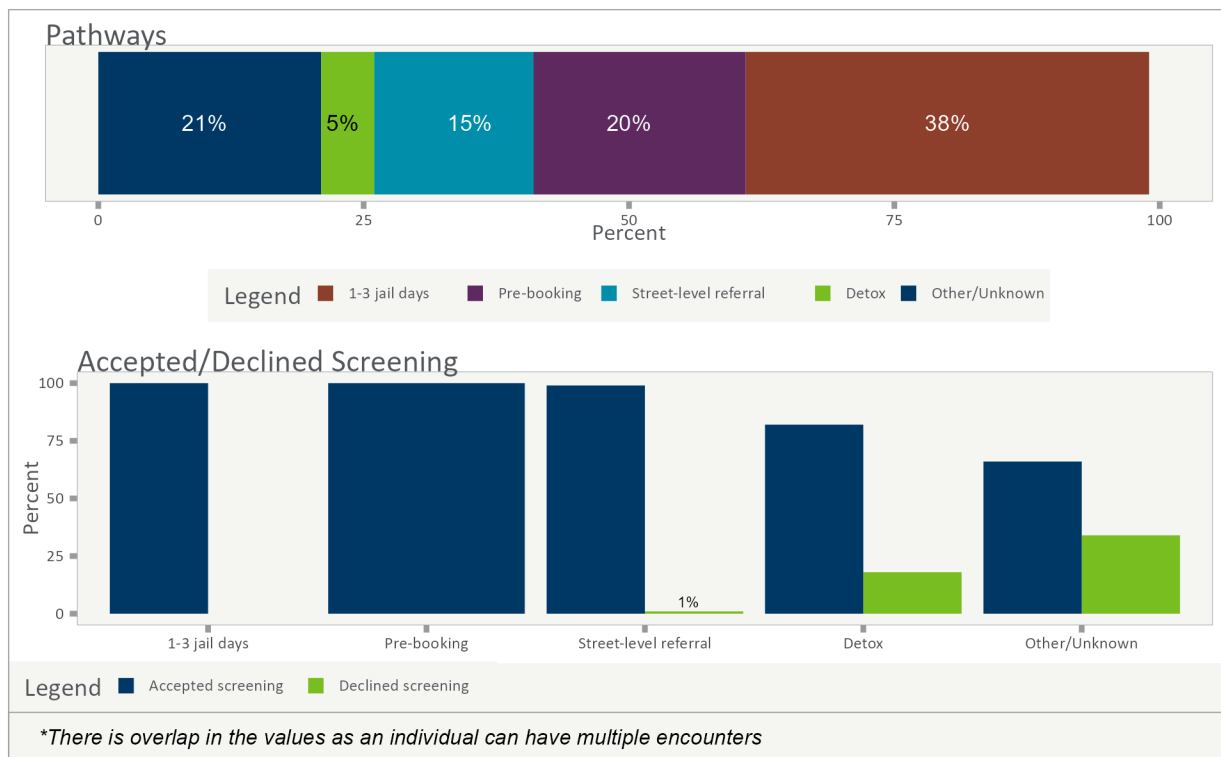
Distributions of race, ethnicity, age, and sex across different referral sources (N = 3,466 encounters). Values below x-axis groups indicate the number of encounters within each demographic cut. Encounters with missing values for a given demographic level were omitted.

Yellow Line Project Pathways

While referrals are made by individuals involved in an encounter, the encounter itself can be associated with one of four pathways. Originally the Yellow Line Project was designed to allow for three specific pathways: street-level, pre-booking, and short-term (1-3 day) jail stays. However, as discussed above

many individuals encounter the Yellow Line Project after exiting from a state or county-run detox center, even if a law enforcement officer ultimately makes a referral. The way in which a CBC interacts with an individual referred to the program differs depending on the pathway (see Figure 1), but the goals are the same: provide a screening, determine eligibility, connect to resources, and (where applicable and desired) begin a My Yellow Line Plan. The top panel of Figure 6 indicates that about 2 in 5 individuals enter Yellow Line when they are in a short-term jail stay and 1 in 5 enter during pre-booking. The smallest percentage of individuals come through the detox pathway. The bottom panel of Figure 6 shows the screening acceptance rates through each one of the pathways.

Figure 6. Proportional Distribution of Yellow Line Pathways and Screening Acceptance



Individuals can become involved with the Yellow Line Project through 1 of 4 pathways, as indicated in the top figure. If individuals were deemed ineligible for Yellow Line after a screening, no indicator of a pathway was recorded, so percentages displayed here are only for those deemed eligible (N = 654). When no record of eligibility could be found and no pathway was indicated, the pathway was categorized as “Other/Unknown” (21% of cases). The bottom figure shows the rate of screening acceptance for those offered initial screenings by the Yellow Line Project within each of the four pathways.

Among those who were eligible for the Yellow Line Project, there was a high screening acceptance rate. As noted above, most encounters that follow the Detox pathway originate from street-level encounters, with Yellow Line contact being initiated after the individual exits a detox facility. Interestingly, encounters that follow a Detox path have a much higher rate of screening rejection than other street-

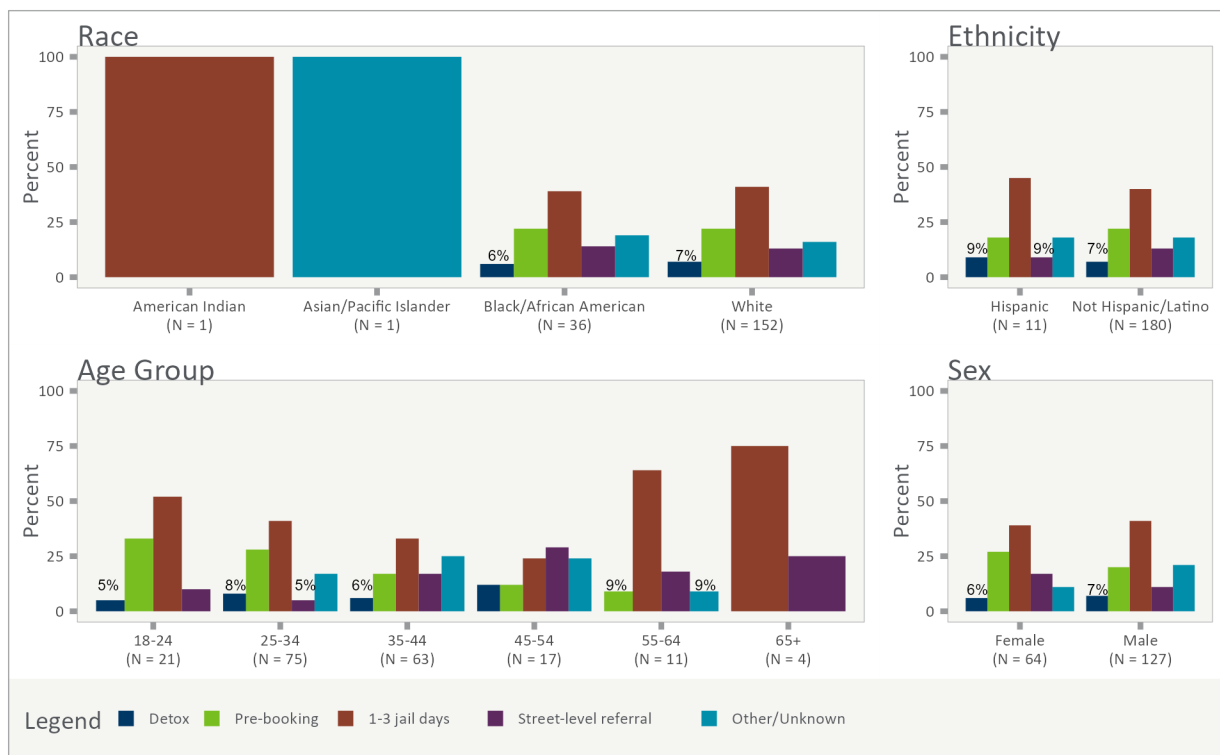
level referrals. This is in line with observations made by Yellow Line Project administrators about the difficulty in connecting with individuals after they leave a detox facility.

While pathway is an important indicator for how an individual becomes involved with yellow line, in the majority of cases it is not recorded because the individual is deemed *Not Eligible* for the Yellow Line Project. Eligibility determinations occur after screenings by CBCs, so it may be useful to record individual eligibility as distinct from the specific pathway by which Yellow Line was involved.

Demographic Patterns in Yellow Line Project Pathways

Figure 7 shows the demographic characteristics of individuals who become involved with Yellow Line through each of the four pathways. Similar to Figure 6, only Yellow Line encounters that were determined to be eligible for continuation identified pathway. As such, the number of encounters within each demographic cut is low, which may occlude relevant patterns across different demographic groups.

Figure 7. Demographic Makeup of Yellow Line Project Participants, by Pathway



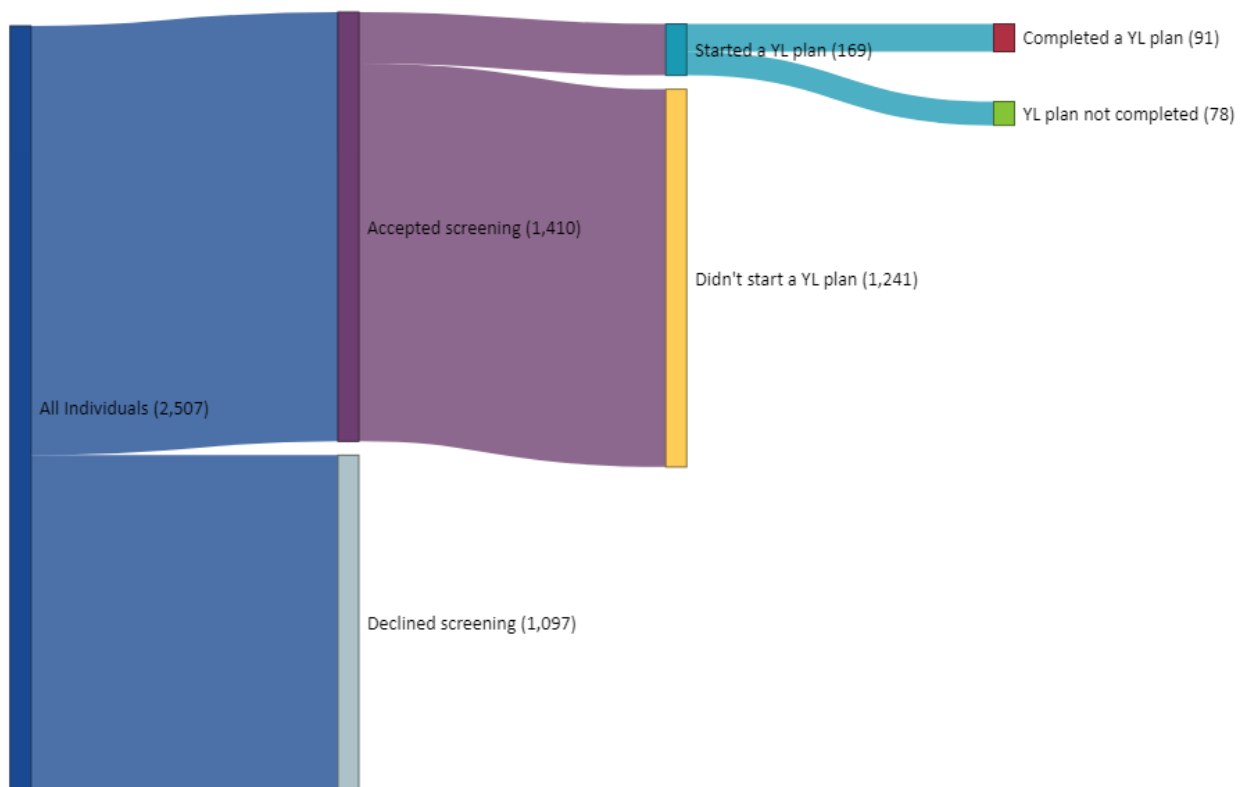
Demographic composition of individuals involved in Yellow Line encounters. Because only those who are eligible for the Yellow Line Project have a pathway recorded, counts reflect eligible encounters where demographic information was recorded (N = 785). Encounters where indicated demographic information was missing were excluded. Numbers below the x-axis groups indicate number of encounters in the indicated demographic cut.

The Yellow Line Process

From an implementation standpoint, the Yellow Line Project prioritizes making initial contact with individuals who might benefit from the program and providing these individuals behavioral health and chemical dependency screenings. However, as noted above these initial contacts can continue into the development of individualized care plans. During a given Yellow Line encounter, individuals can accept or reject an offered screening, decide whether or not to start a My Yellow Line Plan, and then either successfully complete the plan or exit the program.

Figure 8 shows how many individuals completed each of these stages at in at least one of their Yellow Line encounters during 2019 and 2020. When offered an initial screening, 56% accept that screening in at least one of their Yellow Line encounters. Of those who accept a screening in at least one of their encounters, 12% begin a My Yellow Line Plan, and of these 54% successfully complete the program.

Figure 8. Individual Completion of Yellow Line Project Stages

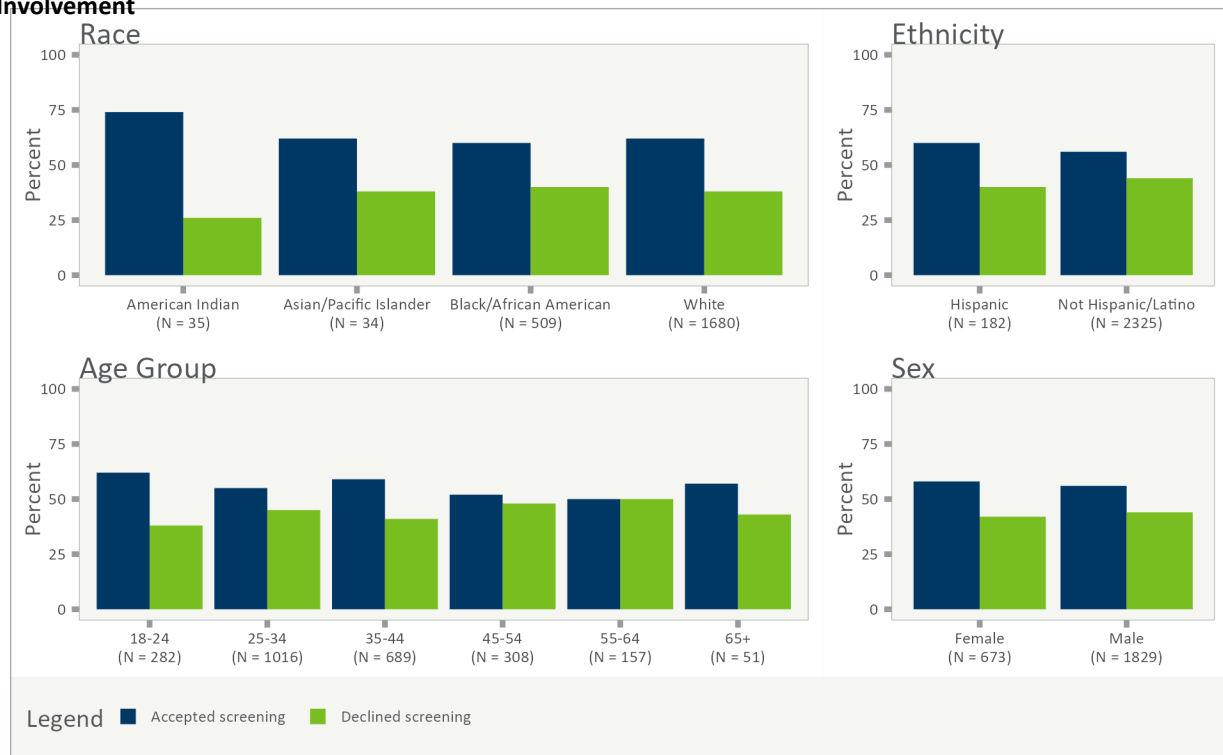


Sankey diagram showing completion of Yellow Line stages by individuals. Individual Yellow Line participants were considered to have completed a particular stage if they completed that stage at least once across any of their Yellow Line encounters in 2019 and 2020.

Demographic Patterns in Yellow Line Process Stages

Figure 9 shows demographic breakdowns of who accepted and declined screenings. Across all groups, people were more likely to accept than decline a screening (Figures 9, 10, and 11 do not show information on individuals for whom demographics were missing). American Indians accepted screenings at a higher rate than all other race categories. Hispanic and non-Hispanic people accepted screenings at similar rates, as did males and females. In nearly all the age groups, people were more likely to accept than decline the screening, however, acceptance rates were higher among younger age groups, and lowest among people 45 to 64 years of age.

Figure 9. Demographic Makeup of Individuals who Accepted and Declined a Screening as Part of Yellow Line Involvement



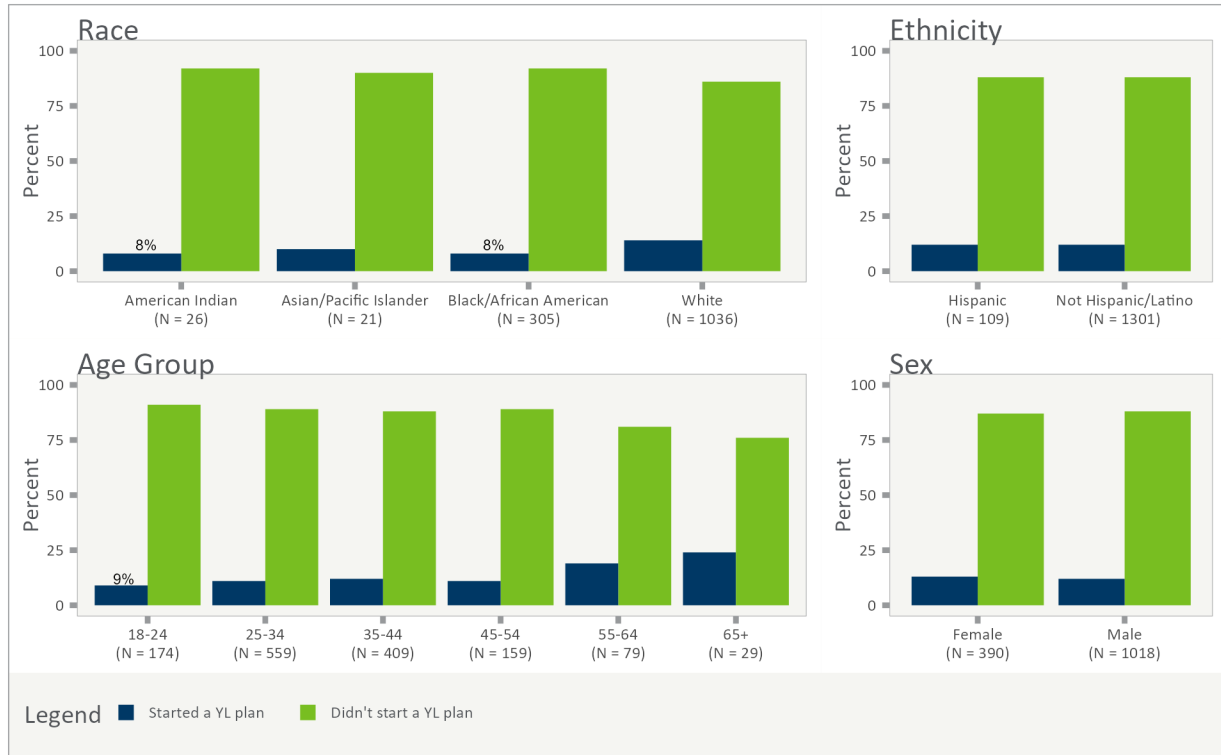
Distribution of race, ethnicity, age, and sex across individuals offered a screening by a Yellow Line CBC (N = 2,507). Proportions of individuals who accepted and rejected screenings are shown for each group. Numbers below groupings on the x-axis indicate the number of individuals in each demographic cut. Records on individuals under the age of 18 were omitted.

After an individual is determined to be eligible for Yellow Line, they are offered by a CBC to develop a My Yellow Line Plan. This process is the most intensive part of the intervention, where the individual works with a CBC to document their goals and commit to series of steps to achieve the goals.

Figure 10 shows the recorded demographics of individuals who are eligible to start a My Yellow Line Plan after their initial meeting with, and screening by, a CBC (N = 1,410). It is clear from Figures 8 and 10

that most who accept a screening do not go on to start a My Yellow Line plan, though increasing age appears to be a possible predictor of likelihood of plan initiation. A larger percentage of people who identify as white begin a My Yellow Line Plan than those who identify as another non-white race.

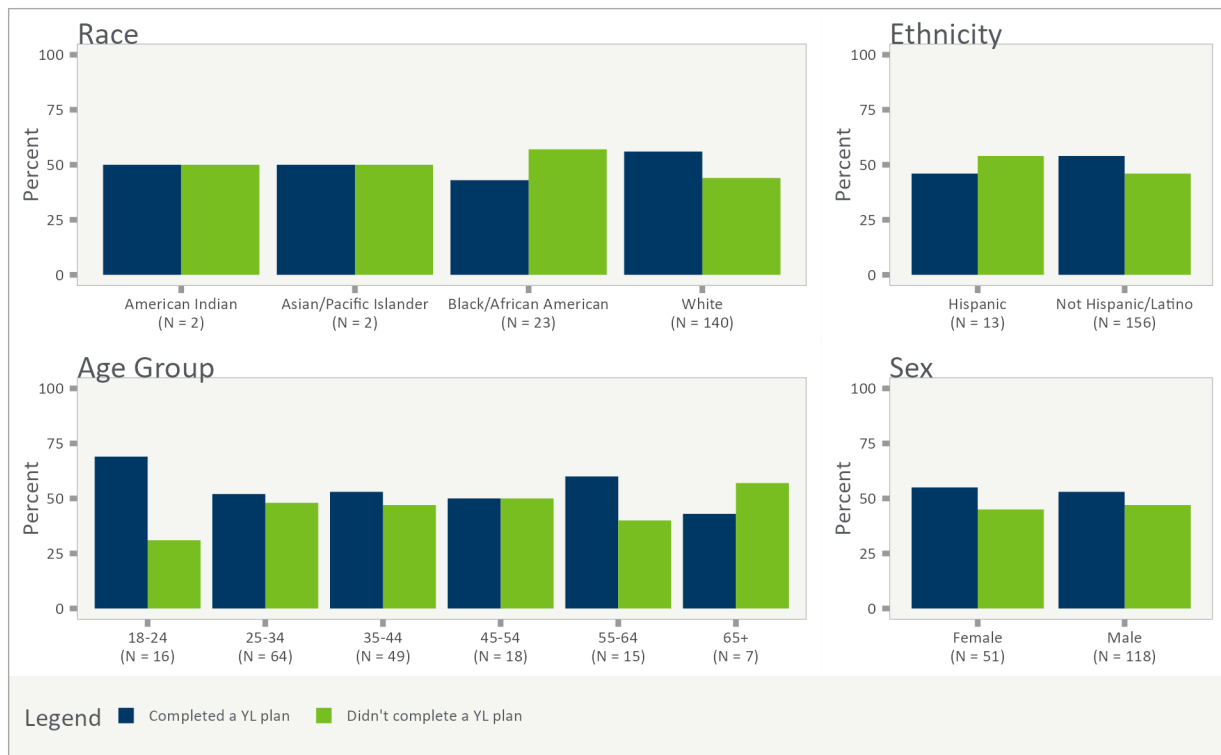
Figure 10: Demographic Makeup of Individuals who Begin and Do Not Begin a My Yellow Line Plan



Distribution of race, ethnicity, age, and sex across individuals who were eligible to begin a My Yellow Line Plan following a screening (N = 1,410). Proportions of individuals who did and did not begin a plan are shown for each group. Numbers below groupings on the x-axis indicate the number of individuals in each demographic cut. Records on individuals under the age of 18 were omitted.

Finally, individuals who started a My Yellow Line Plan are usually given 60 days to work through the steps they identified with their CBC. A plan was considered “complete” when the participant met all the goals and benchmarks set during the My Yellow Line Plan development. Figure 11 shows the demographic composition of people who do begin a My Yellow Line Plan, separated by those who do and do not complete the plan after initiation. The figure suggests that White individuals and non-Hispanic individuals are more likely to complete a plan than not, whereas Black/African American and Hispanic individuals are more likely to *not* complete a plan. Interestingly, while the 18-25 age group had the smallest percentage to start a My Yellow Line Plan, of those who do start one nearly three quarters a go on to complete the program. Males and females completed plans at roughly the same rate.

Figure 11. Demographic Makeup of Individuals who Complete and Do Not Complete a My Yellow Line Plan

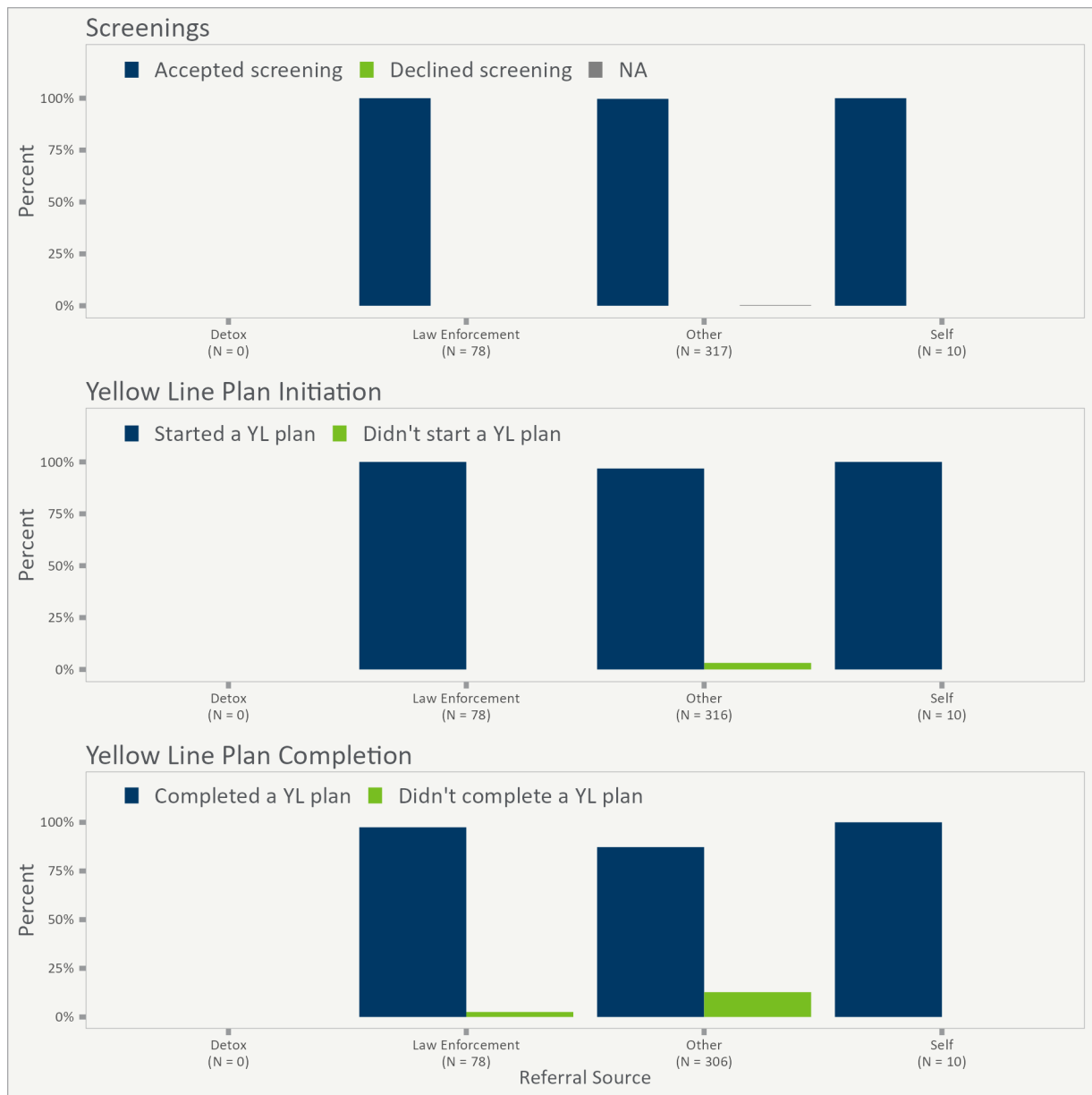


Distribution of race, ethnicity, age, and sex across individuals who attempt to complete a My Yellow Line Plan following a screening (N = 169). Proportions of individuals who did and did not begin a plan are shown for each group. Numbers below groupings on the x-axis indicate the number of individuals in each demographic cut. Records on individuals under the age of 18 were omitted.

Yellow Line Program Success by Referral Source

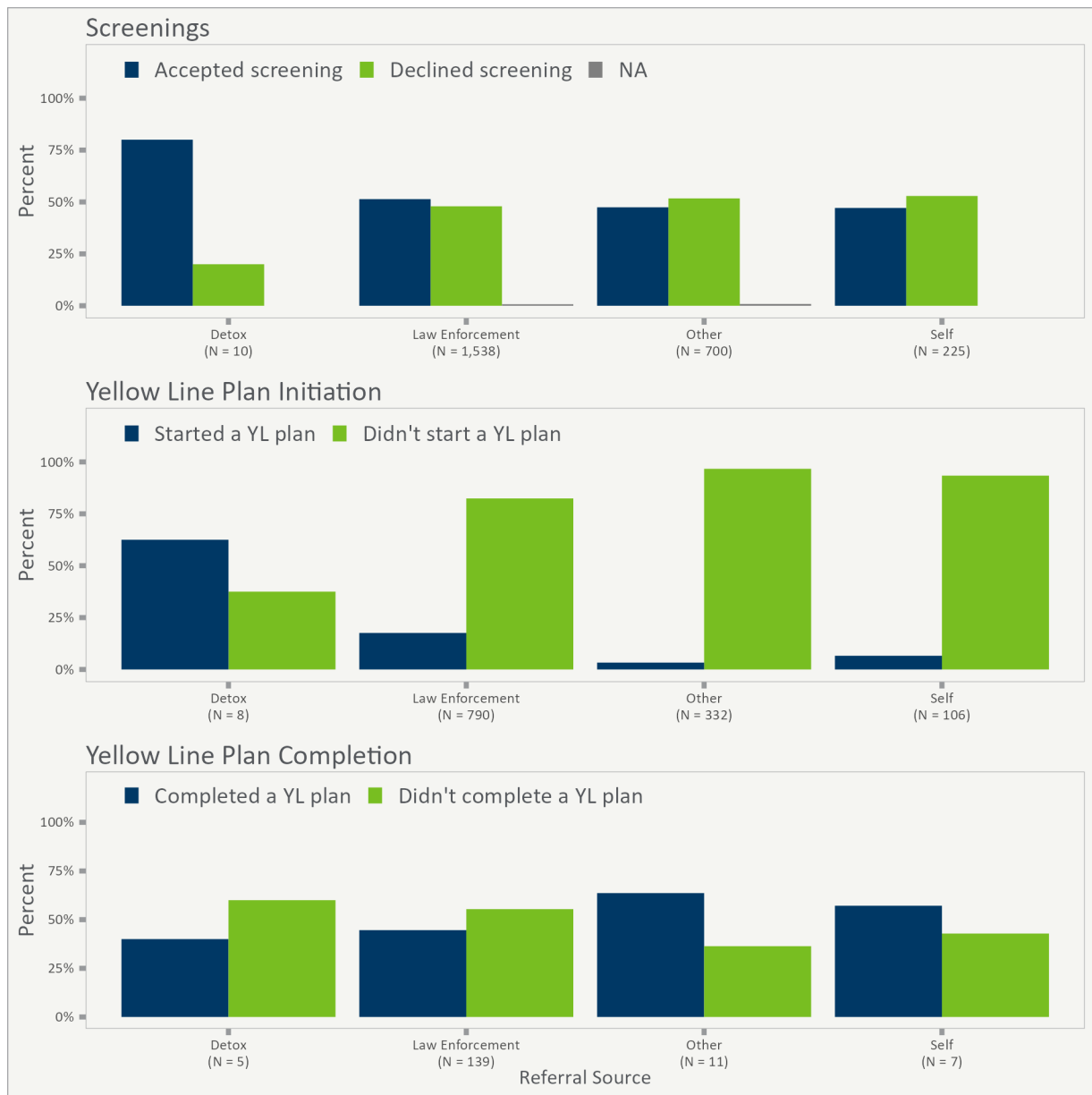
In addition to the potential for individual demographics to impact a person’s progress through the Yellow Line Program, how they are referred to the program may also change the likelihood of success. Importantly, discussion with Yellow Line administrative staff indicated that the program has undergone changes in how it is implemented at the ground level over the years. This flexibility is unsurprising, as most social programs must adapt their theory-driven conception to the realities associated with meeting the needs of actual people. However, such change to implementation can reveal important patterns about how the program is working and evolving. Figures 12, 13, and 14 show what percentage of Yellow Line Program encounters moved through each program stage in 2018, 2019, and 2020 respectively. We have included Detox as a referral source here, though as stated above it is also considered a program pathway.

Figure 12. Yellow Line Stages by Referral Source (2018)



Percent of encounters for a given referral source that did or did not advance through a particular stage of the Yellow Line process. The number below each label on the x-axis indicates the number of encounters from that referral source in that stage. Encounters that did not complete a given stage are not counted in the subsequent stage. Data shown here is for the first six months of the Yellow Line Program's implementation, from July 1 through December 31, 2018.

Figure 13. Yellow Line Stages by Referral Source (2019)



Percent of encounters for a given referral source that did or did not advance through a particular stage of the Yellow Line process. The number below each label on the x-axis indicates the number of encounters from that referral source in that stage. Encounters that did not complete a given stage are not counted in the subsequent stage. Data shown here is for the year 2019.

Figure 14. Yellow Line Stages by Referral Source (2020)



Percent of encounters for a given referral source that did or did not advance through a particular stage of the Yellow Line process. The number below each label on the x-axis indicates the number of encounters from that referral source in that stage. Encounters that did not complete a given stage are not counted in the subsequent stage. Data shown here is for the year 2020.

These figures illustrate that the program’s function was notably different in 2018 as compared to 2019 and 2020. For example, nearly all screening offers were accepted in 2018; acceptance rates are much lower in 2019 and 2020. This is likely due to early enthusiasm by program administrators and partners, but also likely reflects an expected “burn-in” period during the first several months of activity for most

social programs. At the beginning of implementation, many public programs experience highly variable outputs and outcomes as implementation is flexed to meet the realities of the communities being served. For example, in 2018 the majority of referrals fell into the “Other” category, which reflects referral sources that are not obviously affiliated with a detox center or a specific law enforcement agency (though it is possible these entities were involved). By contrast, “Law Enforcement” is the primary referral source in both 2019 and 2020.

The number of encounters attributable to each referral source is similar in 2019 and 2020, though there is a marked decrease in the number of encounters that advance through each stage in 2020³. For example, nearly 50% of people referred by law enforcement who began a My Yellow Line Plan successfully completed the plan in 2019. This percentage drops to only about 25% in 2020. Importantly however, screening acceptance rates were similar in 2019 and 2020 for “Law Enforcement” and “Other” referrals (the most prevalent categories).

Summary

The information presented thus far comes from administrative records collected by the Yellow Line Project itself to monitor its own progress and scope. Importantly, data collected by the Yellow Line team was obtained with the consent of program participants, with the express purpose of monitoring and evaluating the program’s progress. The quality and utility of this data is notable and provides an excellent example of how intentional and thoughtful data collection during the life of a public program can provide valuable insights into how that program functions and who it reaches.

The participant demographic information, in particular, is useful for understanding who is (and is not) receiving the program and how the program might adjust to improve equity in program completion. In many instances, the patterns in access and utilization of Yellow Line services were similar across racial, ethnic, age, and sex subgroups, suggesting that the program is reaching a wide range of people; however, there are some cases where there are potential inequities that could be addressed. Based on this programmatic data, important patterns and characteristics of the program were identified and discussed above, and we summarize several of the key takeaways here.

First, it is clear that while the scope of the Yellow Line Project was intended to address social needs within Blue Earth County, its reach extends beyond into other counties. Minnesotans who live in neighboring counties experience benefits from this program by encountering it while traveling through the state. This is notable because it means that programs like Yellow Line may have positive benefits for the state at large, even when such broader outcomes are not in the expected scope of the project.

Second, it is also clear that law enforcement involvement constitutes a significant component of the program’s implementation. Nearly 75% of all referrals came from law enforcement agencies, 58% of

³ It is important to note that the beginning of the COVID-19 pandemic in March of 2020 almost certainly impacted Yellow Line implementation and progress, as virtually no public program in the State of Minnesota was unaffected by the socio-political changes that arose in response to the pandemic.

Yellow Line Encounters occurred post-arrest (pre-booking and 1-3 day jail stay pathways). The Yellow Line Project was designed with law enforcement in mind and buy-in from the county Sheriff's office was identified by program administrators as one of the keys to the program's success. It is evident from the data that Blue Earth County's law enforcement infrastructure is closely involved with the program, suggesting that such a relationship is necessary for the success of programs that seek to emulate Yellow Line.

Third, the primary interface between the Yellow Line Project and Minnesotans comes in the form of mental health and substance abuse screenings. Of the 2,507 individuals in 2019 and 2020 who were offered screenings, 56% accepted a screening at least once. However, only 7% went on to start a My Yellow Line Plan, and only 4% completed the program. While this indicates a substantial drop-off in the direct interaction post-screening between the program and those in need, it is noteworthy that 1 out of 8 individuals who accept a screening start a My Yellow Line Plan, and more than half of those finish. It is also important to remember that CBCs provide a list of relevant services and resources to individuals during the screening. While this guidance is less structured and specific to individuals, it does suggest an important secondary avenue for the program to aid those in need. Of individuals referred to the Yellow Line Project because of a possible behavioral health issue, more than half received information about possible resources to address their needs. Thus, the screenings themselves may have a meaningful impact on the outcomes of those who receive them.

Visualizing screening acceptance rates in the context of different pathways (Figure 6) and proceeding through the Yellow Line process (Figure 8) provide actionable information for program implementation. It suggests that where the program is offered is tied to uptake. People who enter through pre-booking, short-term jail stays, and at street-level appear much more willing to accept a screening, compared to people entering through detox. This echoes observations by program staff, who noted that people leaving detox can be difficult to engage. In addition, age appears to be related to screening acceptance as well, with individuals under the age of 45 more likely to accept a screening than older individuals (Figure 9).

Figure 8 shows points during the program when people tend to drop off or disengage; the starkest point is after screening, when only 12% of people screened go on to begin a My Yellow Line plan and the remaining 82% do not have further contact with the program. This could be an opportunity for additional outreach or different engagement strategies to increase the number of people who take the next step and being a plan.

Further, the demographic analysis of these groups indicates that a slightly larger portion of White individuals start My Yellow Line plans than American Indians, Asian/Pacific Islanders, and Black/African Americans (Figure 10). Of those who do start plans, people who identify as White completed their plans at a higher rate than Black/African Americans, and non-Hispanic people complete their plans at a higher rate than Hispanic people (Figure 11). These patterns suggest an imbalance in the program's outputs for different groups of people which warrant further exploration for potential inequities.

In sum, the data collected by Yellow Line staff provides important and actionable insight into program operations. The next step is to better understand the impact of the program on outcomes for people in

Blue Earth County. Are they better off, as measured by recidivism and use of behavioral health services, compared to people living in other Minnesota counties that do not have a Yellow Line program? A report exploring that question is expected to be released by the end of 2022.