Law Enforcement Assisted Diversion (LEAD):

A multi-site evaluation of North Carolina LEAD programs





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Executive Summary

Background

Law Enforcement Assisted Diversion (LEAD) is a pre-arrest criminal justice diversion program for people living in the community who use drugs and are at risk of being charged with low-level criminal offenses. Instead of arrest for unlawful conduct like shoplifting, petty theft, illicit drug use, possession of drug paraphernalia, or sex work, the program allows law enforcement officers to refer individuals to LEAD, which connects participants to a range of behavioral health treatment and support services. The program is rooted in harm reduction principles and strategies utilizing a non-judgmental and person-centered approach to engagement. Examples of harm reduction include provision of services like syringe exchange and naloxone administration to improve safety. This approach does not require the individual to commit to abstinence prior to receiving treatment and support services, but rather "meets people where they are" in their path to recovery. LEAD was developed and first implemented in Seattle, Washington in 2011, and has since been implemented nationally. At the time of this evaluation, LEAD programs were operating in six North Carolina communities.

Methods

Our research team from Duke University School of Medicine, in consultation with North Carolina Harm Reduction Coalition, conducted a four-site evaluation of LEAD programs in North Carolina, taking a mixed-methods approach to examine both program processes, including program implementation and operations, and participant outcomes. Evaluation sites were selected to represent the diversity of different drug-affected communities in NC. Mixed methods of evaluation included semi-structured interviews and focus groups with program partners, police officers, and program participants, as well as quantitative analyses of administrative records (healthcare, case management, and criminal justice involvement) to assess program outcomes.

Findings—Outcome evaluation

In the studied sites, LEAD had the most significant positive impact for participants who were well engaged with the program, i.e., having medium or high levels of contact with LEAD staff following referral to the program. Across the evaluation sites, our quantitative analyses demonstrated that participants who were consistently engaged with the program had 1) fewer citations and arrests, 2) more outpatient behavioral health visits for some sites, and 3) significantly higher utilization of medications for treating opioid use disorder after their referral to LEAD as compared to people who were referred but had little or no engagement with the program. We also found that crisis-related service use was lower among individuals enrolled in the program than what would have been expected if they had not enrolled. Conversely, rates of crisisrelated service use were higher than expected among those who were consistently engaged

with program staff, suggesting that group may have had greater need for those types of services and were successfully connecting to them.

These quantitative findings were supported by qualitative analysis of interviews with program stakeholders, who observed that engaging with LEAD staff, even intermittently, improved participant outcomes. LEAD staff provided program participants consistent and non-judgmental emotional and logistical support to navigate life challenges in a unique way not typically provided by other people in their social networks. Although there may have been other factors influencing participants' outcomes that we could not observe and measure, the association between engagement and positive outcomes is consistent and appears to have been an essential driver of the programs' benefits.

Findings—**Process evaluation**

All stakeholder groups—including program participants—strongly valued their LEAD programs, and many wanted to expand their programs' reach. However, they identified barriers to referral such as restrictive eligibility criteria and low awareness or buyin to LEAD among some law enforcement officers. Once referrals were made, there were also barriers to enrollment (i.e., completion of the intake assessment with a case manager) in the program; across the sites, just 30-50% of individuals referred to the program went on to enroll. According to stakeholder interviews, warm hand-offs from referring police officers to case managers were not always possible, and thereby increased the chance that individuals would not follow up for an intake assessment at the case management agency within two weeks. Unclear messaging about program objectives may have led some prospective participants to believe wrongly that participation in treatment was required by the program. Programs implemented LEAD using the resources they had, sometimes falling short of national recommendations for full-time dedicated LEAD staff doing field-based outreach. Staffing gaps and overburdened staff also posed challenges to engagement and other program operations. Finally, individuals who were referred to LEAD via arrest diversion were more likely to enroll than those who had a social referral (referrals made for a person the officer believed could benefit from program services, in the absence of probable cause to make an arrest), but they were also less likely to fully engage with the program.

Conclusions & Recommendations

LEAD participation was associated with promising criminal justice and service utilization outcomes among participants who actively engaged with LEAD staff, though enrollment and engagement could be strengthened.

Programs should be adequately resourced to support full-time dedicated LEAD staff engaged in field-based outreach, meeting participants where they are in the community. To expand programs and scale up beneficial outcomes, we recommend holding regular officer trainings, expanding eligibility to increase the number of appropriate referrals, including to address existing racial inequities in referrals, working to improve the rate of enrollment after referral via intensive fieldbased outreach, and encouraging and strengthening participant and community engagement.

Authorship

Allison R. Gilbert, PhD, MPH, Reah Siegel, MPH, Michele M. Easter, PhD, Josie Caves Sivaraman, PhD, Meret Hofer, PhD, Deniz Ariturk, MA, Marvin S. Swartz, MD, & Jeffrey W. Swanson, PhD

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The Duke research team included: Allison R. Gilbert, PhD, MPH (Principal Investigator); Reah Siegel, MPH, (Project Coordinator and Analyst); Michele M. Easter, PhD, Marvin S. Swartz, MD, and Jeffrey W. Swanson, PhD (Co-Investigators); Josie Caves Sivaraman, PhD and Meret Hofer, PhD (Postdoctoral Associates); Deniz Ariturk, MA (Health, Law, and Justice Fellow); Ruth Wygle and Grace Feng (Senior Research Assistants); Lillian Clark, Cameron Cucuzzella, Sydney LaPine, Ruthie Kesri, and Emely Gutierrez (Research Assistants). We also owe big appreciation to our Duke collaborators from the Opioid Collaboratory in the Department of Population Health Sciences, namely Nidhi Sachdeva, MPH (Senior Research Program Leader) and Asheley Skinner, PhD (Portfolio Principal Investigator).

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We would also like to give special thanks to the program participants, themselves, who participated in the evaluation.

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SECTION 1: LEAD Description and NC Program Evaluation Background

Law Enforcement Assisted Diversion (LEAD) is a pre-arrest criminal justice diversion program for people living in the community who use drugs and are at risk of being charged with low-level criminal offenses. In lieu of arrest for unlawful conduct like shoplifting, petty theft, illicit drug use, possession of drug paraphernalia, or sex work, the program allows law enforcement officers to refer individuals to LEAD, which connects participants to a range of treatment and support services. LEAD was developed and first implemented in 2011 in Seattle, WA, as a response to adverse effects of harsh criminalization of drug use and to reduce pervasive racial inequities in charges and arrests associated with drug use. The LEAD model is grounded in a harm-reduction framework, which aims to reduce the harms associated with drug use. Examples of harm reduction include provision of services like syringe exchange and naloxone administration to improve safety. This approach does not require the individual to commit to abstinence prior to receiving treatment and support services, but rather "meets people where they are" in their path to recovery.

1.1 LEAD Support Bureau core principles and program design

In 2011, a diverse group of stakeholders in Seattle, Washington, came together to develop a racially equitable alternative to repeated arrests and incarceration of people whose lowlevel unlawful conduct stemmed from unmet behavioral health needs, and launched a new model to divert people away from policing and into community-based care at the earliest opportunity: the moment of potential arrest. They named it LEAD[®] – Law Enforcement Assisted Diversion. Centered at the intersection

FIGURE 1.1 LEAD core principles

LEAD CORE PRINCIPLES	DESCRIPTION
Focus on Systemic Change	Program partners should be collectively committed to reducing reliance on the criminal legal system and to increasing investment in human services
Focus on Public Safety	Program mission should be framed as a public safety effort that uses human service tools
Focus on Racial Justice	Program partners should be collectively committed to reducing racial inequities
Focus on Harm Reduction	Program practices and resources should be guided by harm reduction principles
Shared Vision Across Stakeholder Groups	There should be a common understanding among program partners of the problem they are addressing and a shared high-level vision for change in delivery of human services

of public health, public safety, and racial justice, LEAD was the nation's first pre-arrest, pre-booking strategy to address disruptive or unlawful conduct stemming from substance use and extreme poverty. LEAD is intended to help communities develop a new, non-punitive pathway to community-based care for people who commit, or are at high risk of committing, law violations related to their behavioral health challenges or related poverty. Instead of prosecution and incarceration, LEAD provides long-term, client-directed, street-based intensive case management based on harm reduction principles. Public Defender Association (PDA), a nonprofit organization and one of LEAD's founding organizations, has served as project manager for the flagship LEAD site in Seattle/ King County since 2011. In response to burgeoning interest across the U.S., in 2016, PDA established the LEAD Support Bureau (LSB) to support communities in maximizing the value and impact of their LEAD programs. The LSB offers technical assistance to jurisdictions around the country that are developing LEAD programs, following a set of core principles developed by PDA that are essential to program success (Figure 1.1).

The LEAD model was first designed with law enforcement officers as the primary point of referral. The model described two LEAD referral pathways: arrest diversion and social contact referrals. Arrest diversions occur when an officer makes a referral for an individual who is actively engaging in low-level unlawful conduct at the time of their encounter, and the referral is made in lieu of arrest. Alternately, officers can offer a social contact referral to individuals they encounter who they believe to be at risk of criminal justice involvement driven by unmet behavioral health needs or chronic poverty, but at a time when there is no probable cause for arrest. If the individual is eligible and interested, there is then a direct connection, or a "warm hand-off," made by the officer to a LEAD outreach worker or case manager, who ideally responds to the location where the diversion is taking place. Next, the

LEAD case manager and participant complete an initial intake assessment that identifies the participant's immediate needs and priorities. From that point, case managers consistently work with participants to identify and connect them to appropriate and locally available resources and support services, including food, essential medical services, short- or long-term housing, application for public benefits, and behavioral health services. In this client-driven, harm reduction model, LEAD imposes no behavioral mandates on participants, except for requiring an initial intake and a signed release of information to enable communication among providers.

Dozens of communities around the United States have adopted and adapted LEAD, but prior to the development of a fidelity framework and other guidance resources, they sometimes found it difficult to implement the model with fidelity. To support LEAD's effective replication, PDA recently developed a set of foundational materials that define the LEAD model, explain its core principles and methods, illustrate the LEAD theory of change, detail associated core metrics, and present the elements of fidelity essential to LEAD. In 2020, in response to national demand for justice reform, PDA developed a new iteration of the LEAD model that enables a wider array of community stakeholders to refer people into LEAD without requiring officer involvement. Dubbed Let Everyone Advance with Dignity, this adaptation retains LEAD's effective, multiagency stewardship and foundational commitment to non-punitive, community-based harm reduction methodologies. LSB (https://www.leadbureau. org) has many resources to help guide program implementation, policy, and practice, including a LEAD Fidelity Framework that reflects the recent model adaptations and can be accessed here.

At the time of this evaluation, LEAD programs were operating in six North Carolina communities.

1.2 NC LEAD evaluation

Our research team (Allison R. Gilbert, PhD, MPH, project Principal Investigator) in the Department of Psychiatry and Behavioral Sciences, Duke University School of Medicine, conducted this evaluation in partnership with the North Carolina Harm Reduction Coalition (NCHRC), and several LEAD program partner agencies across four LEAD programs in North Carolina. The evaluation was conducted from March 2019 – June 2022, and all research activities were approved by Duke's Institutional Review Board. See **Figure 1.2** for a detailed timeline of all evaluation activities.



FIGURE 1.2 LEAD evaluation timeline

We used a mixed-methods approach to examine both program processes and outcomes, as implemented in four North Carolina jurisdictions. Sites were selected to represent the diversity of different communities in NC. Mixed methods of evaluation included semi-structured interviews, focus groups, and quantitative analyses of administrative records. (For more information about the Evaluation Focus and Methods see Sections 2 and 3). The Duke evaluation team consulted with the NCHRC, an organization dedicated to the implementation of harm reduction interventions, public health strategies, drug policy, and justice reform in North Carolina. NCHRC provides technical assistance to all NC

LEAD programs and helped select and recruit the four evaluation sites. NCHRC provided extensive input to the evaluation, but all analysis and development of this report was conducted by the Duke research team. The four evaluation sites represent varied geographic settings, with two sites being largely rural, and two sites being mostly urban.

1.3 NC evaluation sites: Program implementation process

NCHRC was instrumental in implementing LEAD in North Carolina and the Southeast. Since 2013, NCHRC has provided naloxone overdose response training to more than onethird of NC law enforcement departments. Police departments in North Carolina were some of the first in the Southern U.S. to equip their officers with naloxone starting in 2015. The same year, Fayetteville Police Department and NCHRC established a post-overdose response team, and Fayetteville Police Department began providing publicly-available information to NCHRC outreach specialists to help connect people to treatment and support services. These experiences paved the way for the implementation of the first LEAD program in North Carolina and the Southeast in Fayetteville in November 2016. Thereafter, NCHRC supported LEAD implementation in seven other locations across the state, including the three other Duke evaluation sites. The Wilmington program started June 2017, the Catawba County program started in May 2018, and the Waynesville program launched June 2018. In each of the four sites, LEAD started as a collaboration between NCHRC, the local district attorney's office, local police department(s), one or more behavioral health services agencies, and the Local Management Entity/Managed Care Organization (LME/MCO) that is responsible for managing and disbursing the State's Medicaid and indigent-care funds for behavioral health services in the LME/MCO's geographic catchment area.

We refer to the employees at various agencies that contributed to implementing and operating LEAD, including LEAD staff members and involved law enforcement leadership as "program partners" throughout the report. During the year leading up to the first referral, LEAD program partners at each site adapted LEAD guidelines for their local operating procedures. Since then, these policies formally remained unchanged, though some program processes and practices evolved over time (further explored in Section 5). Additionally, due to the COVID-19 pandemic that began in March 2020, sites started conducting some of their operations virtually, such as the LEAD enrollment process (i.e., intake assessment),

LEAD staff visits, and the Operations Work Group meetings, which the LEAD programs in North Carolina call "case staffings". Two years after the start of the pandemic, the LEAD sites continued to exercise the option of conducting any of these activities virtually. As of April 2022, the Fayetteville, Wilmington, and Catawba County (Catawba) programs were still operating in a similar format as originally studied by the Duke evaluation team, while the Waynesville program entered a transition period and was not actively operating. Program timelines of the three operational programs (Fayetteville, Catawba, and Wilmington) can be found in **Appendix A**.

1.4 NC evaluation sites: Program goals and vision

The four evaluation sites shared a desire to implement the LEAD model in an effort to change their approach to pervasive illicit substance use, and move toward a harm reduction approach. In all four sites, there was a shared acknowledgment among participating agencies that the traditional approach of arresting and incarcerating individuals who use drugs and who commit low-level, nonviolent criminal offenses has limited effectiveness and poses considerable harm to public safety and community well-being.

While the general problem and solution were shared, each of the four sites had unique circumstances in their communities that motivated their implementation of LEAD programming. For example, two of the four sites implemented their programs explicitly to address disproportionately high rates of opioid use and overdose death, while the other two started with a broader vision of responding to excessive criminalization of drug use. The LEAD model intends to reduce the disparity of arrest among people who incur drug charges, which historically has disproportionately affected people of color; where the sites did not have formally stated goals to address these disparities, two sites changed their policies informally in an effort to be more inclusive.

1.5 NC evaluation sites: Program design

The target population for all NC LEAD programs were individuals who use drugs and who would otherwise be charged with low-level criminal offenses or be at risk for future arrest. Exclusion criteria included 1) histories of trafficking, delivering, or intending to deliver drugs, 2) certain violent crimes in the past 10 years, 3) promoting sex work or exploiting minors, 4) appearing to be a poor fit for the program (e.g., violent, posing a risk to self or others, or not appearing to be amenable to services, and 5) being of minor age (under the age of 18). At the time of implementation, each site's program excluded individuals on probation. However, over time, and as it became evident that it was excluding too many people who could benefit from LEAD, each site at different times informally adapted their policy to allow people on unsupervised probation to participate.

In line with guidance from the LEAD Support Bureau at the time the NC programs were implemented, outlined in Section 1.1 above, participants entered NC LEAD programs through arrest diversion referrals or social contact referrals (called social referrals in the NC programs). In both cases, and in accordance with the original LEAD model, the decision whether to refer the individual to LEAD was made at the discretion of the police officer. For three of the four sites, members of the community or LEAD staff could also initiate LEAD social referrals but had to do so in collaboration with a police officer. If an individual accepted LEAD, each program connected the referred person to the LEAD case manager via operational protocols that varied across programs.

For individuals who met eligibility criteria, the four NC LEAD programs required participants to complete the intake assessment within 14 days of referral and to sign a release of information and consent to share information among the project partners and treatment providers. If someone referred to LEAD via an arrest diversion did not complete the enrollment process, the referring police officer and the district attorney's office could opt to reinstate the diverted charges.

Once an individual was enrolled in LEAD, they remained in the program for as long as they chose, with no mandatory end date to LEAD participation. Consistent with harm reduction approaches, LEAD participants were not required to abstain from using drugs. LEAD participants could meet with LEAD staff as often as was feasible to discuss their needs and next steps, and LEAD staff could provide a variety of supports and connections to services. A detailed description of the variation in the four sites' referral process, enrollment process, and engagement with LEAD participants can be found in **Section 5**.

1.6 NC evaluation sites: Socio-demographic contexts

The sites had relatively high levels of poverty as compared to the United States average, including low levels of home ownership, housing stability (except Catawba County), labor force participation, and above average rates of lacking health insurance coverage among their respective community members (**Table 1.1**). A large proportion (42%) of community members in Fayetteville, in particular, reported their race as Black alone, a demographic group that has been historically underserved and overrepresented in the criminal justice system. Catawba County and Waynesville were both largely rural communities.

TABLE 1.1 Evaluation site demographics

	CATAWBA COUNTY	WILMINGTON	FAYETTEVILLE	WAYNESVILLE	U.S.
Percent Black alone	9%	18%	42%	2%	13%
Owner-occupied housing unit rate 2016-2020	71%	45%	44%	56%	64%
Living in same house 1 year ago, percent of persons age 1+ year, 2016- 2020	88%	78%	75%	85%	86%
Bachelor's degree or higher, percent of persons age 25+, 2016-2020	23%	42%	27%	28%	32%
Persons without health insurance, under age 65, per- cent	15%	12%	11%	13%	10%
In Civilian Labor Force, total, percent (population 16 years and over)	62%	61%	52%	53%	63%
% registered voters Republican	44%	31%	23%	35%	29%
Persons in poverty, percent	12%	22%	19%	18%	11%

Data Source: North Carolina State Board of Elections, Accessed January, 2022 https://vt.ncsbe.gov/RegStat/Results/?date=01%2F15%2F2022

Data source: Pew Research Center, October 2020, https://www.pewresearch.org/

fact-tank/2020/10/26/what-the-2020-electorate-looks-like-bypartyrace-and-ethnicity-age-education-and-religion/

race-and-ethnicity-age-education-andhttps://www.census.gov/quickfacts

The sites also varied in the severity of their communities' drug epidemics. New Hanover and Cumberland Counties reported levels of drug overdose deaths (40 and 44 per 100,000, respectively) that were significantly higher than the North Carolina average, whereas overdose death rates in Catawba and New Hanover Counties were low and below the state average (22 and 23 per 100,000, respectively) (**Table 1.2**). Substance use treatment rates were reportedly high in all four sites, most notably in New Hanover county (709 per 100,000), and buprenorphine prescriptions were especially high in Waynesville in Haywood County and Wilmington in New Hanover County.



TABLE 1.2 **Evaluation site substance use-related characteristics**

	CATAWBA COUNTY (HICKORY)	NEW HANOVER COUNTY (WILMINGTON)	CUMBERLAND COUNTY (FAYETTEVILLE)	HAYWOOD COUNTY (WAYNESVILLE)	NC
Drug overdose deaths	22 (Low)	40 (High)	44 (Highest)	23 (Low)	28
Drug overdose ED visits	176 (High)	135 (Middle)	173 (High)	132 (Middle)	143
Illicit opioid overdose deaths	80 (High)	83 (High)	81 (High)	64 (Low)	76
Children in foster care due to parental sub- stance use	69 (Highest)	53 (High)	43 (Middle)	28 (Lowest)	45
Incarcerated individuals	294 (Mid- dle)	334 (High)	333 (High)	353 (High)	287
Buprenorphine prescriptions	6,581 (High)	8,160 (High)	2,713 (Lowest)	10,354 (Highest)	4,834
People served in treat- ment	533 (High)	709 (Highest)	450 (Middle)	637 (High)	375

*Depending on availability, data points vary in timing from 2018 - 2020 Data source: NCDHHS Opioid and Substance Use Action Plan Data Dashboard, Accessed January 18, 2022

https://www.ncdhhs.gov/opioid-and-substance-use-action-plan-data-dashboard

SECTION 2: Evaluation Focus

2.1 Evaluation goals

In line with prior research on LEAD programs, our NC LEAD evaluation consisted of 1) an outcome evaluation examining program participants' criminal justice involvement and behavioral health service utilization, 2) self-reported outcomes among a subset of participants who participated in study interviews, and 3) a process evaluation assessing the success of program implementation and operations.

The key research questions that guided the evaluation questions (Table 2.1) were:

- How effective are the LEAD programs at achieving their desired outcomes?
- 2 What factors impact successful program implementation?
 - In what ways do the LEAD programs differ from each other?
- 4 How do the LEAD program differences impact outcomes and implementation?

To illustrate how each evaluation component and research question related to LEAD program activities, an overview of the evaluation plan is overlaid on the LEAD program's logic model in **Appendix B**.

TABLE 2.1 Process and outcome evaluation questions

TOPIC	EVALUATION QUESTION
Outcome Evaluation	
Criminal justice involvement	Do people who are referred to LEAD have fewer charges, arrests, or incarceration days, compared to the year before they were referred?
	Do people who are referred to LEAD have fewer charges, arrests, or incarceration days than similar people who are not referred to LEAD?
Treatment and social service utilization	Do people use more outpatient and community services after they are referred to LEAD, compared to the year before they were referred?
	Do people use fewer emergency services (emergency department and hospitalization) after they are referred to LEAD, compared to the year before they were referred?
LEAD participants' and stakeholders' lives	How have LEAD participants' lives changed during involvement in the LEAD program?
	What needs do LEAD participants have that the LEAD program can assist with?
	How does being a part of the LEAD program change stakeholders' attitudes about substance use and harm reduction?
	How does the LEAD program impact community partnerships (including LEAD partners)?
Community	How does the LEAD program impact the systems that LEAD participants utilize (i.e. criminal justice and behavioral healthcare system)?
Process Evaluation	
Changes to LEAD over time	What changes have been made to the LEAD program operations over time?
Barriers and facilitators for implementation	What impact does staff turnover have on the program?
	What are the barriers and facilitators to continued successful program implementation?
	What changes have stakeholders and LEAD participants wanted to make to the LEAD program?
Contextual factors	In what ways has the COVID-19 pandemic affected program operations (i.e. referrals, engagement, resource availability)?
Referral process	To what extent does the referral process occur as it was intended when the program first started?
	How do the logistics of a referral affect future program engagement?
Stakeholder buy-in	How does law enforcement culture affect officer buy-in? What other factors affect officer buy-in?
	What does the LEAD program do to foster stakeholder (law enforcement and community members) buy-in?
Target population for program	How do the demographics of people referred to and enrolled in LEAD align with the larger population in the community who are charged with drug offenses?
LEAD participant engagement with LEAD staff	What type of engagement do LEAD participants have with LEAD staff (level of contact, connections to services etc.)?
Factors that mediate the impact of LEAD	How does participants' level of engagement with staff affect their outcomes (i.e., use more treatment services, or have fewer charges)?
	Are race, gender, or age associated with different levels of engagement among program participants?

OUTCOME evaluation focus

The outcome evaluation primarily assessed the impact of LEAD on participants' lives, but also considered the impact of LEAD on the community and program partners.

We examined changes in LEAD participants' criminal justice involvement, behavioral health service utilization, and quality of life. For justice-related outcomes, we compared LEAD participants' outcomes with those of similar people who did not participate in the program.

For a summary of all outcomes-related evaluation questions, see Table 2.1.

PROCESS
evaluation focusThe process evaluation assessed LEAD program
implementation and operations and encompassed three
main areas:

- 1) an examination of the extent to which program activities differed across sites
- 2) an evaluation of which program activities occurred and whether they occurred with fidelity to the sites' respective models, and
- 3) an evaluation of the facilitators and barriers that affected successful operation of program activities.

For a summary of all process-related research questions, see Table 2.1.

Please note that the selection of the evaluation's main questions was informed by previous research on LEAD programs and the priorities of the collaborating stakeholders.

SECTION 3: Evaluation Data

Informed by best practices and previous research on LEAD, the evaluation team worked closely with a wide range of site partners to collect qualitative and quantitative data to explore the key evaluation questions of interest described in **Section 2**. Each component of the evaluation methodology is described below and in **Appendices B-D**, including data sources, analytic approaches, and limitations of various datasets. sources, including 1) the statewide criminal justice database, CJLEADS, 2) NC Department of Corrections database, 3) local police department record management systems, 4) LME/ MCO internal databases, 5) program partner agency LEAD files and reports from staff, and 6) LEAD participant engagement with LEAD staff. Each of the data sources is described in more detail below. Due to site-specific limitations, we were unable to obtain several sources of data from the Waynesville program. See **Table 3.1** for an overview of the quantitative data used in this evaluation, and their respective source and time frame of observation.

3.1 Quantitative data

Quantitative data were collected from six

TABLE 3.1

Description of quantitative data

DATA	DATA SOURCE	TIMEFRAME OF OBSERVATION	SITES
Criminal offense charges and county jail incarcerations	Statewide criminal justice database (CJLEADS)	One year pre-LEAD referral date through 12/31/2020	All
Prison incarcerations	NC Department of Corrections database	One year pre-LEAD referral date through 12/31/2020	All
All drug charges eligible for diversion in LEAD program's geographic area	Local police department record management systems	Program's full duration (different for each site)	Fayetteville, Catawba (Hickory only), Wilmington
Behavioral health service utilization	Managed care organization (MCO) internal databases	One year pre-LEAD participant's referral date through 12/31/2020	Fayetteville, Catawba, Wilmington
LEAD program documentation (officer referral forms, incident reports, enrollment assessments, case notes)*	LEAD partner agency LEAD files	Program's full duration (different for each site)	All
LEAD participant engagement with LEAD staff	Primary data collection directly from LEAD staff	Program's full duration (different for each site)	All

* LEAD program documentation included both quantitative and qualitative data. We coded and quantified some measures of interest that were originally represented qualitatively (i.e., in narrative format) in program records.

3.1.A-1. Criminal justice involvement data.

All criminal charges, jail incarcerations, and prison incarcerations were collected for anyone who was referred to the program regardless of enrollment status, as well as for a matched comparison group for Fayetteville, Wilmington, and Catawba. Length of observation varied by person. For all individuals, outcomes were collected starting 12 months before their referral. Postreferral observation periods ranged from three months up to three years after referral, depending on the time between the referral and the end date of our observation window, 12/31/2020. Charges and jail incarceration data came from the NC statewide criminal justice database (CILEADS) and prison incarceration data came from the NC Department of Corrections. We collaborated with each police department's crime analyst or other representative to gather the data. Comparison group members were identified by the evaluation team from a dataset of de-identified individuals who were charged with LEAD-eligible drug offenses during the time frame that the program was operational. From that list, comparison group members were selected on a one-to-one match to LEAD participants based on demographic characteristics (race, gender, and age). After selection, the crime analyst determined whether the selected individuals had any prior convictions that would have rendered them ineligible for the program (e.g., violent crime convictions in the past 10 years) or had previously been enrolled in LEAD. All eligible individuals were included in the comparison group, and their criminal justice data were collected for the same observation period as the people referred to LEAD (12 months before referral or eligible charge through December 2020).

See **Appendix C-1** for a description of the criminal justice involvement data management, data limitations, and analysis methods.

3.1.B-1. Behavioral health service

utilization data. Services funded by the sites' Local Management Entity/Managed Care Organization (LME/MCO) were collected for all people who were referred to LEAD and had any paid claims. Periods of observation varied by person and as with the criminal justice data, started 12 months before referral and lasted for at least three months and up to three years after referral through 12/31/2020. Behavioral health services include inpatient and outpatient substance use and mental health treatment and community-based services, such as mobile crisis or assertive community treatment (ACT). Typically, no treatment utilization data were available for LEAD participants who had private health insurance or were self-pay for services. However, the Wilmington site partnered with a private detox facility that donates detox beds for LEAD participants free of charge, and many participants at that site used the private facility in lieu of an LME/MCO-covered facility. Therefore, at that site, the evaluation team collected LME/MCO data as well as detox service dates from the private facility.

See **Appendix C-2** for a description of the behavioral health service utilization data management, data limitations, and analysis methods.

3.1.C. Jurisdiction-wide drug charges eligible for diversion. Crime analysts from LEAD partner police departments identified all people in their respective jurisdictions who had been charged with LEAD-eligible drug offenses during the duration of their programs. For all individuals with a charge, the crime analysts collected demographic information, as well as the date, time, location, and name of the charge. As explained in **Section 3.1.A-1**, we used a small subset of these data to create comparison groups for three of the four sites to be included in the criminal justice outcomes analyses. We used the full jurisdiction-wide dataset to identify how LEAD participants

compared demographically to the greater population of people who were arrested for drug charges. While all individuals selected for the comparison group in the outcomes analysis were determined to be eligible for LEAD, criminal history was not assessed for this jurisdiction-wide data set, so it is unknown whether these individuals would have been eligible for LEAD based on their criminal history and probation status. These data were also limited to drug charges eligible for diversion, rather than all low-level offenses eligible for diversion. As such, it is likely that some individuals who use drugs and could be eligible for LEAD were omitted from the jurisdiction-wide dataset because they were charged with non-drug offenses and their drug use was not knowable in these data.

3.1.D-1. LEAD program documentation.

Relevant program documentation related to participants' experiences in LEAD were collected from LEAD program partner agencies. All program documentation was gathered and maintained by LEAD program representatives as part of the routine processes of the program. Depending on the site, such documentation included 1) incident reports outlining the circumstances of the interaction in which a police officer referred an individual to LEAD, 2) referral forms completed by a police officer at the time of the LEAD referral, 3) intake assessments and other forms included in enrollment process for LEAD participants, and 4) case notes documenting LEAD participant updates. All documents were de-identified by LEAD partner agencies prior to being shared with the evaluation team. All forms captured some quantitative data, and some forms also contained gualitative data including lengthy narratives, responses to open-ended guestions, and hand-written notes by LEAD staff members.

See **Appendix C-3** for a description of data management, data limitations, and analysis methods by quantitative data type.

3.1.E-1. Participant engagement with LEAD staff data. The LEAD evaluation team created a tool to characterize LEAD participants' engagement with the program, as there was no existing program documentation of the frequency of contact between staff and participants or number and type of referrals that staff made for participants. Working with LEAD staff members, we developed a set of questions to capture the LEAD participant and staff experience. Questions included LEAD staff's assessment of each participant's level of contact with them and whether they made connections to a wide range of services. The evaluation coordinator collected LEAD staff members' responses to the engagement tool for each person who was referred to and enrolled in their program.

See **Appendix C-4** for a description of participant engagement data limitations.

3.2 Qualitative data

The Duke evaluation team collected and analyzed qualitative data that included 1) semi-structured interviews with program partners, including LEAD staff and partner agency representatives, 2) semi-structured interviews with LEAD participants, and 3) focus groups with law enforcement officers. For an overview of the qualitative data sources used in this evaluation, see **Table 3.2**.

See **Appendix C-5** and **Appendix D** for a description of the qualitative data management, recruitment strategies, data limitations, and analysis methods.

TABLE 3.2 Description of qualitative data

DATA	TIMEFRAME OF DATA COLLECTION	NUMBER OF PARTICIPANTS
Semi-structured interviews with LEAD program partners	10/2019 - 02/2021	27
Focus groups with law enforcement officers	12/2019 - 03/2021	4 focus groups with 19 total participants
Semi-structured interviews with LEAD participants	12/2019 - 02/2021	22

3.2.A-1. Program partner interviews. The Duke evaluation coordinator conducted 27 semi-structured interviews with stakeholders between October 2019 and February 2021. Interviewees included LEAD case managers, LEAD outreach workers, LME/ MCO representatives, LEAD law enforcement coordinators, district attorney representatives, clinical supervisors, and NCHRC staff. All stakeholders who expressed interest in participating were interviewed. Thirteen interviews were conducted in-person; however, with the emergence of COVID-19, the final 14 interviews were conducted using Zoom conferencing services. All interviewees were offered \$30 for their time. but compensation was declined in some cases due to organizational policies. See Appendix **D** for a description of recruitment strategy for program partner interviews.

3.2.A-2. Program partner interview content.

The semi-structured stakeholder interview guide took a comprehensive approach to understanding experiences related to LEAD implementation across stakeholder groups. Specifically, stakeholders were asked about their perceptions of the referral process, the quality of collaboration across agencies, the extent to which the program was guided by specific core values and objectives, facilitators and barriers to the effective implementation of LEAD, and challenges and successes of the LEAD program.

3.2.B-1. Law enforcement officer focus

groups. Focus groups with law enforcement officers were conducted with each of the four evaluation sites between December 2019 and March 2021. Three of the four focus groups were composed of law enforcement officers who had made at least one referral to LEAD and the fourth group, Waynesville, was composed of officers who had never made referrals to LEAD due to recruitment constraints. Focus groups were facilitated by the Duke evaluation coordinator and attended by a second evaluation team member who took notes on the flow of discussion and non-verbal communications. The first two focus groups were conducted in the police departments prior to the outbreak of COVID-19, and the remaining two groups were conducted virtually. Officers in the inperson focus groups were not compensated monetarily, but instead provided with a meal. No compensation was provided for the virtual focus groups. See Appendix D for a description of recruitment strategy for focus groups.

3.2.B-2. Law enforcement officer focus

group content. The protocol guiding focus groups centered around several topics, including LEAD training for officers; perceived level of buy-in for LEAD among officers and police leadership; referral decision-making processes, strategies, and challenges; officers' role after referral; perceived effects of the COVID-19 pandemic on LEAD implementation and referral; and perceived challenges and successes of the LEAD program.

3.2.C-1. LEAD participant interviews. The Duke evaluation coordinator conducted 22 interviews with LEAD participants between December 2019 and February 2021. Interviews were held in person whenever possible, but moved to a virtual setting in March 2020 due to COVID-19. In-person interviews were typically held in LEAD case managers' offices, and virtual interviews were held using Zoom conferencing services. All interviewed participants were compensated \$30 for their time. See **Appendix D** for a description of recruitment strategy for LEAD participant interviews.

3.2.C-2. LEAD participant interview content.

The protocol guiding participant interviews took a comprehensive approach to understanding participants' program experiences and life changes since enrolling in LEAD, and included both open-ended questions and structured components. Participants were asked about the referral process, their involvement in and satisfaction with LEAD and its affiliated staff, recommendations for program improvement, and targeted information about the effect of various services on their drug use and life circumstances.

3.2.D. Additional materials. Additional program documents were reviewed to gain a deeper understanding of the four programs. These materials were not systematically analyzed but rather referenced to inform data collection, analysis, and interpretation throughout the evaluation. They included 1) notes taken by the evaluation coordinator during case staffing meetings and informal communication with site partners and NCHRC staff, 2) feedback from periodic presentations by the Duke LEAD evaluation team to site partners on LEAD evaluation progress, 3) policy and procedures documents from study sites, and 4) news articles and other media on the North Carolina LEAD programs.

SECTION 4: Outcome Evaluation Findings

4.1. Criminal justice involvement and behavioral health service utilization: Quantitative analysis findings

We used longitudinal administrative data to estimate the effect of LEAD program participation on criminal justice involvement and behavioral health service utilization. A detailed description of our analyses is available in **Appendix C**. In the sections below, we present the results of three different sets of outcomes based on the pathways of referral, enrollment, and engagement with the program. We compared:

- Individuals who were referred to LEAD versus a comparison group of LEADeligible individuals who were not referred;
- 2 Among individuals who were referred, those who enrolled versus those who did not enroll;
- Among individuals who enrolled, those who had medium or high levels of engagement with the program versus people who were referred and had low or no engagement.

In **Sections 4.1.A** and **4.1.B** below, we first present unadjusted data to show basic trends from the pre- to post-referral periods. We then present results from more sophisticated models reflecting how individuals' program referral, enrollment, and program

engagement status—in the six months before referral ("pre-LEAD") and the six months after referral ("post-LEAD")—were associated with rates of criminal justice involvement and behavioral health service utilization. This formulation helped us distinguish how the observed outcome rates deviated from the changes that would have been expected in the absence of LEAD participation. We tested the statistical significance of those associations by calculating rates of the "expected" post-LEAD outcomes compared to the actual, or "observed", rates after referral to the program. Our analyses accounted for demographic differences between compared groups, as well as differences in how the program was accessed (through social or diversion referrals). We present results for each LEAD site as well as pooled results across all sites. A limitation of the pooled results is that they do not fully account for site-level variability. This limitation will be addressed through extended model specification in future academic publications, but those additional forthcoming analyses are not expected to affect interpretations and recommendations.

4.1.A. Criminal justice involvement

findings. To evaluate criminal justice outcomes, we collected detailed data on criminal charges. **Table 4.1** refers to data combined across all four sites, with frequencies of criminal justice encounters over time for people who enrolled in the LEAD program. Without accounting for engagement level, there was a modest reduction in the proportion of participants who had misdemeanor citations and arrests in the year following enrollment (43%) as compared to the 12 months before (49%). More participants, however, had felony arrests (19%) and incarcerations (23%) in the 12 months following enrollment than in the 12 months before enrollment (11% and 18%, respectively). The most common types of charges before and after enrollment were drug possession or paraphernalia, property crimes, and other minor offenses (e.g., trespassing, loitering, etc.).

TABLE 4.1

Criminal justice encounters pre- and post-LEAD enrollment, regardless of engagement level

	ONE YEAR PRE, N (%)	6 MONTHS POST, N (%)	ONE YEAR POST, N (%)
Total	120	118	115
Any charge	59 (49%)	37 (31%)	49 (43%)
Number of charges (mean)	1.4	0.7	1.3
Any arrest	39 (32%)	26 (22%)	35 (30%)
Number of arrests (mean)	0.5	0.3	0.5
Any citation or arrest	59 (49%)	37 (31%)	49 (43%)
Number of citations or arrests (mean)	0.9	0.7	1.3
Any misdemeanor	43 (36%)	27 (23%)	33 (29%)
Number of misdemeanors (mean)	0.8	0.4	0.7
Any felony	13 (11%)	11 (9%)	22 (19%)
Number of felonies (mean)	0.2	0.1	0.3
Any new incarceration	22 (18%)	21 (18%)	27 (23%)
Number of new incarcerations (mean)	0.2	0.2	0.4
Types of charges			
Any drug manufacturing or sales	1 (1%)	1 (1%)	2 (2%)
Any drug possession	15 (12%)	13 (11%)	17 (15%)
Any drug paraphernalia possession	14 (12%)	5 (4%)	12 (10%)
Any DWI	3 (2%)	0 (0%)	2 (2%)
Any motor vehicle	18 (15%)	5 (4%)	10 (9%)
Any property crime	17 (14%)	13 (11%)	17 (15%)
Any prostitution	0 (0%)	0 (0%)	0 (0%)
Any technical violation	6 (5%)	1 (1%)	7 (6%)
Any weapons possession	0 (0%)	0 (0%)	1 (1%)
Any violent misdemeanor	9 (8%)	0 (0%)	1 (1%)
Any violent felony	0 (0%)	0 (0%)	0 (0%)
Any other crimes against a person	2 (2%)	2 (2%)	3 (3%)
Any other minor crimes	20 (17%)	12 (10%)	16 (14%)
Any other felony crimes	0 (0%)	2 (2%)	3 (3%)

To assess the relationship between LEAD participation and future criminal justice involvement while taking into account expected trends, we studied changes in the combined rate of citations and arrests. We first evaluated criminal justice involvement for all people who were referred to LEAD, regardless of whether they enrolled. We used data for people who had LEAD program-eligible drug charges but who were not referred to LEAD as a comparison group, allowing us to generate rates of outcomes that would have been expected in program participants had they had not been referred. We did not receive data for people with LEAD program-eligible charges from Waynesville, so that site was not included in this analysis. Figure 4.1 demonstrates that people who were referred to LEAD generally had the same or lower rates of citations/arrests in the six-month after referral than in the six-month before their referral. Catawba and Fayetteville, in particular, had much lower observed rates in the post-period

than expected, whereas observed rates were slightly higher than expected in Wilmington. In the pooled data, observed rates in the postperiod were also lower than expected and the difference was statistically significant: 0.40 citations/arrests per person were observed, compared to 1.02 that would have been expected without program participation. These findings suggest that the LEAD referral is associated with lower rates of criminal justice involvement, but it is important to note that there may have been some unmeasured influences among people with arrest diversions (e.g., intrinsic motivation to avoid charges) that contributed to these associations with referral and criminal justice outcomes. The comparison group for this analysis only included people who were charged (i.e., people who would have been in the diversion category). Thus, the comparison group could have had higher citation/arrest rates in the post-period, in part, if they comprised a higher-risk population.

FIGURE 4.1

Observed and expected rates of citations and arrests in the six months before and after referral for people who were <u>referred</u> to the LEAD program



We also studied how LEAD enrollment may have affected the rate of citations and arrests. Figure 4.2 shows that in two sites, people who were referred to and enrolled in the program had higher rates of criminal justice involvement in the pre-LEAD period than in the observed post-referral period. In Wilmington, there was little difference between pre- and post- rates, and in Waynesville post-LEAD period rates were higher. All sites except Waynesville had observed rates that were lower than would have been expected if participants had not enrolled. This was also the case in the pooled data where, on average, the observed postrate was 0.42 citations/arrests per person,

compared to an expected rate of 0.72 citations/arrests per person. This pooled effect demonstrated statistical significance and is consistent with the hypothesis that enrollment in LEAD is associated with lower rates of criminal justice involvement in the six months following referral. An important limitation of these results is that LEAD enrollment was not randomized; with that, there may have been attributes associated with people's decision to enroll, such as readiness for engagement or change, which could also have contributed to the lower-than-expected levels of criminal justice involvement among enrolled individuals.

FIGURE 4.2

Observed and expected rates of citations and arrests in the six months before and after referral for people who enrolled in the LEAD program



Observed pre-referral rate Observed post-referral rate Zepected post-referral rate

Lastly, we evaluated criminal justice involvement for people who had medium or high levels of engagement with LEAD staff ("more engaged"), according to program staff. We generated expected post-referral rates for the more engaged group using data from people who were enrolled in LEAD but had no or low engagement ("less engaged") with the program. Figure 4.3 illustrates that more engaged people in three sites had lower observed rates of citations/arrests in the six-month post-period compared to

the six-month pre-period. In Waynesville, rates were about the same in the pre- and post-periods. In the pooled analyses of all four sites, observed rates of citations/ arrests were lower in the post-period than expected. This difference was statistically significant in the pooled data, where the observed rate was 0.34 citations/arrests per person, compared to an expected rate of 0.75 citations/arrests per person. This is consistent with the hypothesis that higher engagement with LEAD staff is associated

with lower criminal justice involvement in the six months following referral. A limitation to consider for these results is that people could not be randomized into more or less engaged groups, and there may have been attributes such as "readiness for change" that we could not observe in the data and that were associated with engagement level. These attributes could have contributed to the lower-than-expected levels of criminal justice involvement among more engaged people.

FIGURE 4.3

Observed and expected rates of citations and arrests in the six months before and after referral for people with <u>medium or high engagement</u> with the LEAD program



In addition to the combined outcome of citations/arrests, we also evaluated these events individually, as well as incarcerations, over 6, 9, and 12 months post referral. In Wilmington and Catawba, we generally found that the most stark differences between observed and expected rates were in the 6 month analyses, while the trend was more sustained in the other two sites. Individual sites rarely had statistically significant differences at any follow up period, likely due to small sample sizes and/or relatively few events. Observed rates were generally lower than or equal to expected rates.

4.1.B. Behavioral health service utilization

findings. We also collected detailed data on behavioral health care utilization by linking

to LME/MCO data at three of the four sites. Our analyses were restricted to people who were referred to LEAD, because we could not access records for people who were LEAD program-eligible but not referred. We found that of all people referred to LEAD, 79% (Fayetteville), 60% (Catawba), and 72% (Wilmington) had at least one LME/MCOpaid service encounter. People who did not have any encounters in the LME/MCO data may have used behavioral health services that they paid for out of pocket or that were covered by private insurance, or they may not have had any health care encounters during our observation window. Our analyses treated them as though they did not have health care encounters; and we validated this approach with alternative models that treated absence of encounters as missing data. **Table 4.2** refers to data combined across the three sites, giving types, frequencies, and costs of different health services over time for people who enrolled in the LEAD program, but not accounting for level of engagement or sociodemographic characteristics that we include in the statistical models to estimate outcomes. Notably, service use increased substantially in the 12 months following program enrollment—only 34% of participants had used any behavioral health service in the 12 months before enrollment, while 71% of participants did in the 12 months after enrollment (**Table 4.2**). Outpatient treatment (including MAT) was used by more participants after having enrolled in the program.

TABLE 4.2

Behavioral health service utilization pre- and post-LEAD enrollment, regardless of engagement level

	ONE YEAR PRE, N (%)	6 MONTHS POST, N (%)	ONE YEAR POST, N (%)
Total	110	107	104
Any service	37 (34%)	71 (66%)	74 (71%)
Number of services (mean)	32.2	22.5	32.5
Cost of services (mean)	\$5,637	\$3,412	\$4,575
Any crisis-related service	7 (6%)	16 (15%)	18 (17%)
Number of crisis-related services (mean)	2.0	2.1	2.4
Cost of crisis-related services (mean)	\$2,282	\$1,126	\$1,136
Any hospital admission	21 (19%)	20 (19%)	26 (25%)
Number of hospital admissions (mean)	1.7	1.6	1.6
Cost of hospital stays (mean)	\$3,674	\$5,507	\$5,179
Any outpatient visit	37 (34%)	71 (66%)	74 (71%)
Number of outpatient visits (mean)	31.2	22.1	32 (52.1)
Cost of outpatient visits (mean)	\$3,552	\$1,861	\$2,755
Any MAT visit	3 (3%)	10 (9%)	13 (12%)
Number of MAT visits (mean)	3.7	5.5	72.5
Cost of MAT visits (mean)	\$86	\$136	\$1808
Any detox admission	11 (10%)	13 (12%)	16 (15%)
Number of detox admissions (mean)	1.5	1.4	0.2
Cost of detox stays (mean)	\$3,873	\$7,102	\$1,111

To assess the relationship between LEAD involvement and future health care utilization, we estimated rates of medicationassisted treatment (MAT) utilization, crisisrelated service encounters (which included emergency department visits, facility-based crisis services, and mobile crisis services), and outpatient treatment encounters in the six month before and after referral to LEAD. The rate of MAT utilization increased dramatically after referral to LEAD, but was concentrated in a small handful of people at each site (Fayetteville, 4 people; Catawba, 4; Wilmington, 9) who had many treatments (>100 in four cases). When these data were pooled, we saw that among people enrolled in LEAD, MAT utilization increased from a rate of 0.02 encounters per person in the pre-period to an observed rate of 4.45 encounters per person in the postperiod, where we would have expected 0.05 encounters per person in the post-period if they had not enrolled in the program. These results were statistically significant and consistent with the hypothesis that LEAD enrollment is associated with increased utilization of MAT, overall. We also examined MAT utilization specifically among the more engaged participants, using the less engaged participants to generate expected rates. These findings were consistent with the model that evaluated enrollment, though the observed post-period rate jumped to 7.55 encounters per person for the more engaged group. It is important to note that these MAT rates may be underestimated, as some MAT service encounters were coded in the LME/ MCO data as evaluation and management visits.

We also evaluated crisis-related service encounters among people who were enrolled in the LEAD program and used people who were referred but not enrolled to generate expected rates. Crisis events were relatively rare and not particularly concentrated (no one individual experienced more than five). In the pooled data, the rate of crisis events was 0.29 encounters per person in the sixmonth pre-period. In the post-period, the observed rate was 0.34 encounters per person, compared to the expected rate of 0.79 encounters per person. Though these results were not statistically significant, they are consistent with the hypothesis that, on average, LEAD enrollment was associated with lower rates of crisis-related health care encounters than for people who did not enroll in the program. We also looked at crisis-related service encounters specifically among the more engaged participants, using the less engaged participants to generate expected results. Though Fayetteville data were too sparse to generate site-level results, in part due to a one-year closure of the city's facility-based crisis center, its crisis events did contribute to the pooled results. Figure 4.4 illustrates that the pre-period crisis encounter rate was similar between Wilmington and Catawba, but the observed post-period crisis encounter rate rose in Wilmington and stayed much the same in Catawba. In both sites, the observed post-period rate was higher than the expected rate, a trend that was considerably dampened in the pooled results that included Fayetteville's data (0.59 and 0.56 crisis encounters per person, respectively). Nonetheless, this may reflect that people who were highly engaged with the program were at higher risk for health care crises but not criminal justice involvement. This finding is particularly relevant to Wilmington and may reflect characteristics specific to that program, including a trend of making referrals post-overdose. These findings also likely reflect individual-level factors that are related to individuals' higher engagement with LEAD, including needing and being linked to crisis-related services.

FIGURE 4.4

Observed and expected rates of c<u>risis-related health care encounters</u> in the six months before and after referral for people with <u>medium or high engagement</u> with the LEAD program



Lastly, we evaluated rates of outpatient encounters for people enrolled in the LEAD program, and we used people who were referred but not enrolled in the program to generate expected rates. Again here, we found that pre-period rates in Catawba and Wilmington of outpatient service use were similar to each other, but that Wilmington had much higher observed post-period rates (Figure **4.5**). Observed rates in post-period rates were higher than expected in Wilmington and lower than expected in Catawba. Rates in the pooled data were similar, with 13 observed encounters per person and 16 expected encounters per person. These differences do not lend universal support to the hypothesis that LEAD enrollment was associated with higher than expected rates of outpatient care utilization. This likely reflects site-specific referral practices. For example, Wilmington may have had more outpatient encounters than expected given they were making post-overdose referrals, and perhaps those individuals were more likely to want and need treatment services. We also evaluated outpatient encounters among more engaged people and used people who were less engaged with LEAD to estimate expected post-period rates (Figure 4.6). In this case, Wilmington and Catawba both reflected that the observed postperiod rates were higher than expected (in Fayetteville, the expected and observed rates were similar). Again, the difference between observed and expected rates was larger in Wilmington than other sites, suggesting sitespecific circumstances. Though not statistically significant, the pooled results also reflected this trend, with an observed post-period rate of 20 encounters per person, compared to an expected rate of 15 encounters per person. These results are more consistent with the hypothesis that people who were more engaged with LEAD have higher rates of outpatient service utilization in the six months following referral to the program (**Figure 4.4**).

In addition to the outcomes of MAT, crisis service utilization, and outpatient service utilization, we also evaluated inpatient admissions and detox admissions over 6, 9, and 12 month observation periods. The rarity of detox admissions made them difficult to evaluate. Observed inpatient admissions were slightly lower than expected in Catawba and Fayetteville, and slightly higher than expected in Wilmington. For all outcomes, MCO service utilization results were similar across all three observation periods. None of the associations observed were statistically significant within individual sites.

FIGURE 4.5

Observed and expected rates of <u>outpatient encounters</u> in the six months before and after referral for people who <u>enrolled</u> in the LEAD program



Note: Fayetteville's site specific model could not generate reliable estimates given outpatient encounters were heavily concentrated in the enrolled group.

FIGURE 4.6 Observed and expected rates of <u>outpatient encounters</u> in the six months before and after referral for people with <u>high or medium engagement</u>



4.1.C. Summary of criminal justice involvement and behavioral health service utilization findings. In summary, the pooled findings of our quantitative analysis indicate that LEAD referrals, enrollment, and high engagement were all associated with lower levels of citations/ arrests than would have otherwise been expected in the absence of LEAD. These effects were nearly universal across sites. The MCO findings were less uniform, perhaps due to the rarity of events but also likely due to specific sitelevel factors. MAT rates increased dramatically more than expected in the post-period, though this was concentrated in a few people. Crisis and outpatient service utilization were generally lower than expected, among enrolled people. However, within that group, people who had high or medium program engagement generally had higher crisis and outpatient service utilization than expected.

4.2. Outcome evaluation qualitative findings

In addition to a quantitative analysis of our two key outcomes of interest, criminal justice contact and behavioral health service utilization. we conducted one-on-one interviews with LEAD participants and program partners, and focus groups with law enforcement officers to understand their perspectives on the impact of LEAD. Our analysis of the interviews and focus groups revealed widespread consensus among stakeholders that LEAD benefited program participants, as well as program partners and the greater community. Stakeholder views on LEAD's impact on each of these groups (LEAD participants, program partners, and the community) are presented below. "Program partners" refer to individuals from various agencies that participate in LEAD (i.e., involved law enforcement leadership, case managers, prosecutor's office staff, peer outreach workers, LME/MCO representatives, service providers, and NCHRC representatives). "Stakeholders" refers to program partners, law enforcement officers, and program participants.

Text in the following sections in quotations are comments that were made directly by interviewees during the qualitative interviews or focus groups.

4.2.A. LEAD's impact on program participants. Stakeholder groups described many ways that the LEAD program positively impacted LEAD participants and shared a general sentiment that LEAD is an important and effective program. Program participants described LEAD as a "second chance at life" that provided needed accountability structures. The majority of interviewed participants described dramatic life changes that resulted from being in the LEAD program, such as acquiring stable housing, gaining custody of their children, finding a job, or entering long periods of abstaining from drug use. Most often, program participants related the positive impact of LEAD to the social support provided by LEAD staff and some also described improved relationships with police officers who would check on participants' well-being after their referral to LEAD. This social support was generally perceived to be consistent, stable, and non-judgmental-present even in times of great struggle and active drug use. LEAD program partners also described the program's positive impact on various aspects of participants' lives and considered it to be one of the most significant successes of the program.

Program partners also acknowledged that not every LEAD referral was a "success story" and that some LEAD participants were not greatly affected by their involvement in the program. Some participants disengaged with LEAD staff and services, including services that appeared to have helped them, and some continued high-risk drug use practices. Across the four LEAD programs, at least 11 people referred to the program suffered one or more overdoses, and six individuals died after they were referred. Some program partners lamented that only a few people "actually turned their life around" while participating in LEAD. Nonetheless, program partners widely agreed that individuals whose lives were improved, even in small ways or for a limited time, made LEAD worthwhile.

4.2.A-1. "Recovery capital": a framework for understanding program impact on

LEAD participants' lives. We utilized the recovery capital framework to organize our findings about LEAD's effect on participants' lives. Recovery from substance use disorder is affected by one's access to various kinds of resources: supportive friends and family, money to pay for treatment and other needs, job skills and training, and an ability to adhere to dominant cultural norms. Possessing these assets or types of "capital" improves an individual's likelihood of successful recovery. The recovery capital framework organizes these key personal and social resources into four dimensions, or forms of "capital": social, physical, human, and cultural capital (See Table 4.7; see scientific article on recovery capital listed in the References section for

more detail). We expanded the concept of recovery beyond its traditional definitionachieving long-term abstinence-to include successful harm reduction, i.e., achieving improved safety and wellbeing even if drug use continues. Within the recovery capital framework, each form of capital exists on a spectrum from negative to positive, where positive capital assists individuals' recovery efforts and negative capital hinders them. Our gualitative analysis suggested that LEAD affected different dimensions of participants' recovery capital, with some LEAD participants experiencing positive changes in only one form of recovery capital and others experiencing positive changes in all four. The following section uses the four dimensions of recovery capital to examine and organize the qualitative findings related to the impact of the program on LEAD participants' lives. Subsections present stakeholders' perspectives on how and why the LEAD program did or did not support positive change in each dimension.

TABLE 4.7

Recovery capital framework

Social capital: having access to a helpful network of friends, family, and other social connections that thereby help individuals gain access to resources	Physical capital: money, possessions, and other financial resources that contribute to financial stability
Human capital: the individual attributes that allow people to function well in their lives and communities (e.g., knowledge, skills, educational credentials, physical and mental health, and other traits that allow people to achieve personal goals and manage daily life successfully)	Cultural capital: social norms and expectations and the extent to which a person can meet their needs and be productive within that social framework, including operating within their given community's collective values and beliefs
4.2.A-1a. Social capital. Social capital refers to having access to a helpful network of friends, family, and other social connections that help individuals access needed supports and resources. Participants reported that LEAD	staff provided significant support, thereby contributing to their social capital. They described receiving emotional support during regular check-ins from staff members who "help as much as they can" and LEAD staff always

QUOTE FROM PROGRAM STAFF:

"I try to get them to be the best person they can be every day...and if that person's mad, sad, upset, sitting in a corner using, then that's okay. We'll just sit there and talk, you know?...But try to get them to be able to survive long enough really to get help. That's one thing I've seen: if they want it over time... it can happen. It's just having someone there that they know they can call to say, 'Hey, I'm ready to do something different.'"

accepting them for who they are. Multiple participants stated that the staff member was the only person in their lives who provided this type of support. LEAD participants and program partners even reported that, at times, LEAD staff took on a social support role typically provided by family and close friends. Participants stated that the stability and consistency provided by LEAD staff helped them build a sense of comfort, security, strength, courage, faith, hope, confidence, and accountability. This support created an important foundation from which participants could explore their potential and initiate positive lifestyle changes and self-growth.

LEAD appeared to improve social capital in two additional ways: 1) LEAD staff made connections to community and treatment services that provided participants with supportive recovery networks, and 2) as participants became more stable through their engagement with LEAD, they often re-established estranged relationships with friends and family members, including, in at least three cases, by regaining custody of children. These themes are further explored in the cultural capital subsection.

While many LEAD participants described experiencing positive changes in their social capital as a result of their engagement with LEAD staff and services, some participants reported challenges in working with LEAD staff and/or providers at LEAD-affiliated services (service providers) in ways that may have hindered their social capital. Negative impacts were attributed to LEAD staff turnover and large caseloads; LEAD staff or service providers not always being able to problem solve in moments of need, and, at times, difficult to reach, or inconsistent in following up; and, for some, LEAD staff or service providers seeming disconnected from the realities, needs, and circumstances participants faced. When participants were asked "How often does LEAD staff push you to do something you are not ready to do?" in the survey mentioned above, 18% (n=4) said this occurred "sometimes" and only 45% (n=10) said it occurred "never." Moreover, while 59% of surveyed participants stated that they never felt like LEAD staff was judging their decisions, 23% (n=5) reported rarely feeling that way, and 14% (n=3) reported sometimes feeling that way. These responses to interview and survey questions suggest that, in some cases, experiences with LEAD staff or service providers could be improved to build positive social capital.

4.2.A-1b. Physical capital. Physical capital refers to money, possessions, and other financial resources that contribute to financial stability. Program partners and participants appreciated LEAD's contributions to participants' physical capital as a tangible impact of LEAD. Participants described improvements in their access to resources to meet basic needs (housing, food, clothing, utilities, etc.) and medical needs (prescription medications, medical doctor, dentist); accessing recoverysupportive services and transportation; and gaining or improving employment opportunities. Out of all the people referred to LEAD across the four programs, at least 13 participants gained housing and at least 26 participants gained employment. Some

QUOTE FROM PROGRAM PARTICIPANT:

"He just recently helped me get into a domestic violence shelter...He's helped me with filling out incomebased apartments. He's helped me with getting into my doctor's office I go to now for substance abuse. Therapy, he's helped me get in therapy, just with filling out applications, taking me to interviews, just anything that I need."

QUOTE FROM PROGRAM STAFF:

"I definitely don't think that they would be having the success rate as far as staying out of trouble and staying safe...if it weren't for our support and assistance...like we pay for [the participant's] medications and things like that. And I think that makes a huge difference in his life."

participants also reported improvements in their financial status associated with having stopped drug use. Finally, participants credited the LEAD program with helping them acquire a legal I.D. and avoiding criminal justice consequences, thereby improving their ability to secure paid employment and other benefits.

Alongside these improvements, some participants described ways in which their physical capital needs remained unmet, which negatively impacted their recovery process. Some participants reported having a persistent lack of personal financial resources, which put them under strain, impeded their participation in recovery-supportive services, or kept them in physical or social environments that directly conflicted with their recovery efforts. Some described having no housing or inadequate housing (e.g., living with or near individuals who trigger or even encourage drug use), not having a phone, being unable to cover basic needs such as food or medication, and lacking transportation. These findings suggest that LEAD's impact on participants' physical capital could at times be limited by the availability of sufficient services and resources in the community, which is further explored in **Section 5.2.C-8**.

4.2.A-1c. Human (and health) capital.

Human capital refers to the individual attributes that allow people to function well in their lives and communities. Examples of human capital are knowledge, skills, educational credentials, physical and mental health, and other traits that allow people to achieve personal goals and manage daily life successfully. Health is an essential component of human capital, with some arguing that it should be a separate domain altogether. Because of this distinction, and because improving health outcomes is a key goal of LEAD, we focus first on health capital before addressing human capital more broadly.

Both participants and program partners reported that LEAD contributed to significant improvements in participants' health capital, which was often described as a critical first step toward achieving other improvements in human capital and other forms of capital. The most common reported improvements to health capital were reductions in drug use and improvements in mental and physical health. In interviews, a common example of improved physical health was the management or elimination of drug withdrawal symptoms, which helped participants focus on other aspects of recovery. Participants pointed to substance use services (MAT, detox, and harm reduction services such as syringe services programs), mental health services (psychotropic medications and counseling services), improved access to medical and dental care, and financial support to buy medication as drivers of their health improvements. MAT was most frequently mentioned by participants as the service that
reduced their drug use most. The relationship between health capital and consistent service utilization appeared to be reciprocal participants shared stories in which better health capital increased service utilization, and increased service utilization set the foundation for continued improvements in health capital. Participants who gained access to MAT reported being able to manage withdrawal symptoms, which in turn created greater stability in other aspects of their life. Some participants attributed the improvements in their health capital to the LEAD program

QUOTE FROM PROGRAM PARTICIPANT:

"I haven't used heroin in 10 months. So, that's the longest I've ever went without using heroin...I feel like if it wasn't for the LEAD program, I would be dead."

QUOTE FROM LAW ENFORCEMENT:

"We had a rough June. Two of our very long-term LEAD members actually overdosed and died. So, that was a really difficult time...because we thought we had these people that were really working hard and doing these fabulous things. And then... *June [overdose numbers] popped* really high, due to the fact that some really not good stuff came through the area and we had a lot of deaths and two of them were LEAD participants and one of them was, she'd just been in...and met with all of us and the police officer two weeks prior and we had this wonderful meeting and we ended and everybody went away and everybody was happy and we come back in two weeks later..."

broadly, while others credited specific LEAD activities, such as a goal setting with case managers.

Aside from health improvements, participants described the following other positive changes in human capital while in the LEAD program: 1) overarching improvements in their selfconcept, 2) increased readiness and desire to make life changes, 3) improved affect and cognition, particularly in terms of building capacity to set goals, 4) improved personal skills and tools that aid drug use recovery, such as personal caretaking skills, and 5) enhanced job skills and associated improvements in financial resources. Participants' human capital was enhanced through improvements in social support, access to resources, health, and ability to ask for help or identify their substance use triggers. These mechanisms suggest that improvements in human capital were closely related to improvements in other types of capital, namely social, physical and health capital.

While participants may have experienced improvements in human capital through their involvement with LEAD, their journeys to those improvements were not always linear, and some continued to struggle with a deficit in human capital. Participants described experiencing overdoses, continued drug addiction preventing life improvements, and relapse/recovery cycles. Some participants became open to intervention by the LEAD staff only when they hit "rock-bottom" and continued to be destabilized by events like job loss, even after having received mental health and drug use-related supports and services. Participants with extensive drug use histories invoked their long dependency to explain why their recovery processes were complicated and difficult, and why recovery was still not easy or straightforward despite the supports that LEAD offered. Additionally, while MAT was often seen as critical to regaining health capital, it could also be associated with negative health capital. Medications were sometimes described as losing effectiveness, and some participants

QUOTE FROM PROGRAM PARTICIPANT:

"...where I was living...it was drugs all around, so when...LEAD stepped up and helped me move into an apartment, that's when I got away from the other drugs so I wouldn't be around it and it wouldn't be a temptation."

experienced withdrawal symptoms when they had unstable access to their medication (e.g., had a new incarceration and MAT was not allowed in the detention centers).

4.2.A-1d. Cultural capital. Cultural capital refers to social norms and expectations and the extent to which a person can meet their needs and be productive within that social framework, including operating within their given community's collective values and beliefs. For people with substance use issues, membership in a drug-using subculture can simultaneously be an adaptive coping strategy against social and personal challenges as well as a barrier to recovery.

LEAD was reported to improve participants' cultural capital primarily by providing access to recovery-supportive environments, dismantling relationships within drug-promoting environments, and by removing criminal justice consequences that could impede housing and employment opportunities. These environments not only removed participants from previous networks and environments that promoted drug use, but also provided new social influences that supported abstinence for those who were ready to stop using drugs, and provided opportunities to develop, practice, or regain cultural capital, in the form of recoverysupportive norms, values, manners, behaviors, and understandings of their struggles. Often, the ability to distance from drug-promoting environments was facilitated through the physical capital that LEAD provided (e.g., housing assistance, access to a shelter). For

some participants, however, making these shifts was reported to be very challenging, and failing to do so was cited as a reason for struggling to stay engaged with LEAD staff and other supportive services.

4.2.B. LEAD's impact on program partners.

While not stated as an explicit goal in any NC LEAD program polices, improved coordination and collaboration between program partners was reported to be one of the most significant successes of the programs. The implementation and operation of the four programs appeared to impact program partners by 1) strengthening relationships across program partners and law enforcement and 2) changing partners' understanding of and attitudes about substance use, a priority identified in the model as originally developed in Seattle.

4.2.B-1. LEAD strengthened relationships

across program partners. Most program partners mentioned that the LEAD program helped strengthen relationships across agencies that otherwise would not be in communication with each other. One program partner mentioned that while law enforcement, emergency medical services (EMS), and mental health professionals "rarely talk to each other" in their usual roles, participating in LEAD allowed people from such "different

QUOTE FROM PROGRAM PARTNER:

"I like the fact that [LEAD] is collaborative between law enforcement, our office, and social workers. It's neat having all of those different people in a room talking about stuff and us educating social workers and psychologists about law stuff, and them educating us about treatment. You just learn a lot...through those meetings..." informational silos and different experiences" to come together and collaborate as they worked with a LEAD participant. Other program partners mentioned that while these inter-agency relationships were established to be able to support LEAD participants, they became stronger over time in ways that extended beyond LEAD program operations. For example, two clinical supervisors stated that these stronger relationships were helpful for people who were not LEAD participants, but who were also served by their agencies.

QUOTE FROM LAW ENFORCEMENT:

"I had [this attitude] for most of my career...I didn't really understand the nature of the disease...You're a police officer; you handle the problem, you move on to the next call for service. You don't really receive...a lot of understanding of what's going on from a neurological perspective. Now, we're finally getting that..."

4.2.B-2. LEAD helped change program partners' understanding of and attitudes

about substance use. Several program partners, including several law enforcement officers, reported that they or a colleague had to go through a process of accepting the principles of LEAD and harm reduction during their initial engagement with the program. This process involved either personally learning more about or teaching other partners about harm reduction and the nature of substance dependence as a disease. Some program partners described that they needed to have "an attitude change" about substance use or harm reduction to be able to embrace the principles of LEAD. For example, one program staff member described the LEAD program's focus on meeting people where they are as a

"different way of thinking" that was difficult to accept given prior experience with programs that were focused on abstinence. Being involved in LEAD also appeared to enable some program partners to better support not only LEAD participants but also other community members who used drugs as they develop a deeper understanding of substance use and harm reduction. For instance, a representative from one district attorney's office explained that their role in LEAD, though minimal, helped them become more informed about services in the community for people who use substances, which made them better at their job.

4.2.C. LEAD's impact on the community.

Some program partners noted that LEAD had a beneficial impact on the community, another important goal identified by the LEAD Support Bureau, referring to downstream positive effects on participants' families and social networks, improved relationships between service systems and between law enforcement and the community, and to a reduction, though modest, in the traditional use of the criminal justice system in addressing substance use. Specifically, LEAD appeared to strengthen families and social networks by preventing the harms caused by an incarceration—or in the words of one program partner, "peel[ing] back the layers of mass incarceration"—by helping participants retain or regain child custody (helping participants avoid DSS contact or supporting them as they navigate it), and through fostering improved relationships with the LEAD participants and their loved ones. Through these impacts on family and social networks and the criminal justice system, LEAD helped strengthen communities, an effect that program partners noted could be greater if the programs expanded their reach. (See section 5.1.B for rates of enrollment). As a result, some program partners considered the greatest impact of LEAD to be at the individual rather than systemic level, mostly benefiting those participants who became "success stories."

SECTION 5: Process Evaluation Findings

We conducted the process evaluation to better understand the observed outcomes described in **Section 4** and to provide concrete feedback to improve the four LEAD programs' operations (see **Section 6**). We used a variety of data for this analysis, including LEAD program documentation (i.e., officer referral forms, enrollment assessments, and case notes), LEAD participant engagement with LEAD staff data, qualitative interviews with program partners and participants, and focus groups with law enforcement officers. See **Section 3** for a full description of the data used in this evaluation and their limitations.

The goal of the process evaluation was to assess the extent to which various LEAD program activities were occurring as intended and to identify the facilitators and barriers that affected the success of those activities. We used the NC LEAD programs' policy and procedures documents to identify the programs' activities that were expected to contribute to desired outcomes for participants, program partners, and the community (Figure **5.1**). These program activities fit into three key program areas: 1) referrals to the LEAD program by law enforcement and completion of the intake assessment (i.e., enrollment) by the LEAD case manager (referrals and enrollments), 2) LEAD staff's engagement with LEAD participants (engagement), and 3) program administration and oversight by key program partners (program administration). We describe each of these three program areas below, including variation in the intended and actual process steps across the four sites. We used quantitative data, when available, to summarize the extent to which the activities were occurring and qualitative findings from interviews with participants and other stakeholders to identify the factors that influenced successful implementation of the activities. Analysis of the factors that impacted success is organized into two broad categories: 1) program facilitators and barriers that were within the scope of the LEAD program's control, and 2) **contextual factors**, including individual and environmental factors that were not controlled by the LEAD program but nevertheless influenced program operations.

FIGURE 5.1 Program areas, program activities, and analysis plan



5.1 Referrals and enrollments

This section presents findings related to the key program area of **referrals and enrollments** using data from the LEAD programs and from interviews with participants, police officers, LEAD staff, and other stakeholders. Subsequent sections will present similar data to illuminate the other two key program areas, **engagement** and **program administration**.

5.1.A. Variability in referral and enrollment processes. To examine variation in the referral

and enrollment process across sites we focused on three distinct phases (**Figure 5.2**). The first phase was the initial interaction between the law enforcement officer and the potential LEAD participant, the second phase was the transfer of the referral by law enforcement to another LEAD partner agency by processing paperwork and/ or completing a warm hand-off (i.e., direct handoff of LEAD participant from law enforcement to LEAD staff during referral), and the third phase was the enrollment process that was completed by LEAD staff and was to take place within fourteen days of the initial referral encounter.

FIGURE 5.2

LEAD officer referral and enrollment process



PHASE ONE:

Law enforcement contact. Based on the programs' policy and procedures documents, the initial interaction of the referral process was similar across sites. At their discretion, officers offered LEAD as an alternative to arrest (arrest diversion) or during an interaction when no criminal charge is present (social referral) to eligible people in their community. Individuals had the option to accept or decline the referral. Occasionally, the programs deviated from these written protocols and developed new norms or procedures as they adapted the program to local context. One notable example of such an adaptation

was that the Fayetteville, Waynesville, and Catawba programs allowed community referrals that were initiated by community members and completed by law enforcement. Another example of an adaptation was that the Wilmington program required officers (rather than allowing them to use discretion) to make a LEAD referral for any eligible person they encountered immediately after an overdose ("overdose referral"). Stakeholder and participant perspectives on these unwritten adaptations and their effect on referrals at their respective sites are further explored below in the section on facilitators and barriers (**Section 5.1.C**).

PHASE TWO:

Introduction to LEAD staff. While the steps for Phase One of the referral process were the same in the policy and procedures across sites, the process steps for Phase Two were not, in part for sites adapting program procedures to the resources available to them. The largest difference across the sites was whether and how law enforcement officers were expected to conduct a warm hand-off with LEAD staff after someone accepted a LEAD referral, when the referring officer either dropped the person off with a LEAD staff member or waited until a LEAD staff member arrived at the scene of the referral. For the Fayetteville and Waynesville programs, the law enforcement officers were expected to transport the person who accepted LEAD to the case manager's office during their working hours (9am-5pm). If the case manager was off duty, officers were to drop the individual off at a 24/7 crisis facility. For Wilmington, transporting the person to the case manager's office was an option but not an expectation, and stakeholders reported that it was not typical. By contrast, the fourth program, Catawba, had an expectation that a warm hand-off occur at every referral and that the case manager would arrive at the scene of the referral. If the case manager was not available, staff from a mobile crisis service from the same agency as the case manager went to the scene of the referral instead. For all sites, officer referral forms were sent to the other LEAD partner agencies after the referring incident, which completed the officer's role in the referral.

PHASE THREE:

Enrollment. For all programs, the person referred to LEAD had 14 days to follow up with the LEAD program to complete the enrollment process, which includes the intake assessment and voluntarily signing a release of information and consent to share information among the project partners and treatment providers. For Fayetteville, Wilmington, and Waynesville, the enrollment process involved one assessment completed by the LEAD case managers in their offices. For Catawba, the LEAD case manager completed an initial assessment, usually at the scene of the referral but sometimes at a later date and usually in a location that was convenient for the LEAD participant. The LEAD participant was then to follow-up within 14 days with a clinician to complete a Comprehensive Clinical Assessment (CCA), the Catawba program's version of the intake assessment. Assessments at all four sites

included a goal plan that briefly outlined the LEAD participant's goals for their involvement with LEAD and next steps. If someone who was referred to the program through arrest diversion did not complete the required assessment within 14 days of referral, the officers had the option to reinstate any charges that were suspended for diversion, in which case a warrant would be issued for the individual's arrest.

While some components of the referral and enrollment process were similar across the four programs, the differences in program protocols and actual practice posed unique facilitators and barriers for each program and likely differentially impacted the extent to which referrals and enrollments occurred (see **Sections 5.1.B** and **5.1.C**).

5.1.B. Number of referrals and enrollments.

Below, we describe the number of referrals and enrollments made to all four LEAD programs between the beginning of each program and September 30, 2020 (allowing for a minimum observation period of 3 months for each participant through December 2020, the end of data collection). We also describe the types of referrals and variation across demographic groups.

5.1.B-1. Number and type of referrals and enrollments. Across the sites, there were 242 referrals made between the respective

programs' start dates through September 2020. Of those, 121 people—50% of referrals—went on to enroll in the program. With 91 referrals and 54 enrollments, Catawba had the most referrals and enrollments and also the highest monthly averages for each. Waynesville, which started at the same time as Catawba (mid-2018), had the fewest referrals and enrollments (**Table 5.1**). The average number of monthly referrals and enrollments differed by site and ranged from approximately 1 to 3 referrals per month and from less than 1 to 2 enrollments per month (**Table 5.1**).

TABLE 5.1

Total number of referrals and enrollments by site

CHARACTERISTIC	FAYETTEVILLE	CATAWBA	WILMINGTON	WAYNESVILLE	TOTAL
Total number of referrals	52	91	68	31	242
Total number of enrollments	35 (67%)	54 (59%)	21 (31%)	11 (35%)	121 (50%)
Number of months program was ob- served*	47	29	40	33	
Average number of referrals per month	1.1	3.2	1.7	0.9	1.7
Average number of enrollments per month	0.7	1.9	0.5	0.3	0.85

*Months observed are programs' respective start dates until 9/30/2020

TABLE 5.2 Referral types, by enrollment status

CHARACTERISTIC	ENROLLED, N = 121	NOT ENROLLED, N = 121	TOTAL, N = 242
Referral Type			
Diversion	53 (45%)	14 (13%)	67 (30%)
Social	64 (55%)	93 (87%)	157 (70%)
Unknown	4	14	18

Note: Unknown values are not included in the calculation of percentages.

TABLE 5.3 Criminal charges among arrest diversions

CHARACTERISTIC	ENROLLED, N = 53	NOT ENROLLED, N = 14	TOTAL, N = 67
Charges			
Common minor offenses	4 (7.7%)	0 (0%)	4 (6.2%)
Drug paraphernalia	16 (31%)	5 (38%)	21 (32%)
Drug possession	24 (46%)	8 (62%)	32 (49%)
DWI	1 (1.9%)	0 (0%)	1 (1.5%)
Property	7 (13%)	0 (0%)	7 (11%)
Unknown	1	1	2

The majority of referrals (70%) were social referrals (Table 5.2). Although arrest diversions only made up 30% of referrals, they comprised 45% of enrollments. Of those referred by a diversion referral, 79% (53 of 67 people) enrolled compared to only 41% (64 of 157 people) of people given a social referral. Social referrals were least likely to convert to enrollment in Catawba and Wilmington—only 44% and 23%, respectively, of people who had a social referral went on to enroll. Among the diversion referrals (n=67), the majority (81%) of the charges were drug related, including drug possession and paraphernalia charges and one DWI charge (Table 5.3). (Possession amounts exceeding a quantity for personal use were considered possession with intent to sell or

distribute and were ineligible for the program.) The next most commonly diverted charges were property charges, including fraud, larceny, and recovery of stolen vehicle, and common minor charges, which included panhandling, trespassing, and shoplifting.

The number of referrals and enrollments across the four sites fluctuated significantly over time, ranging from 0 (at times of low program operation due to staff shortages, COVID, or other reasons) to over 40 referrals in a calendar quarter (perhaps due, in part, to practices like post-overdose referrals) (**Figure 5.3**). (See **Appendix E** for site-specific referral and enrollment graphs.)

FIGURE 5.3 Referral and enrollment trends, combined across sites



Note: Values are shown as 0 in December 2020 due to the end of our data collection, not zero referrals and enrollments.

5.1.B-2. Circumstances of referrals.

TABLE 5.4 Circumstances of referrals

Characteristic	Enrolled, N = 70	Not Enrolled, N = 62	Total, N = 132
Reason for police contact			
Officer responded to medical or behavioral health-related incident	19 (31%)	33 (58%)	52 (44%)
Officer responded to reported crime/ accident	19 (31%)	14 (25%)	33 (28%)
Patrol	13 (21%)	6 (11%)	19 (16%)
Person came to officer	10 (16%)	4 (7%)	14 (12%)
Traffic stop	1 (2%)	0 (0%)	1 (0.8%)
Unknown	8	5	13
Referral made between 9am-5pm	47 (67%)	31 (50%)	78 (59%)
Transported by EMS away from scene of referral	7 (11%)	9 (16%)	16 (13%)
Unknown	6	7	13
Transported by law enforcement away from scene of referral	24 (38%)	8 (15%)	32 (27%)
Unknown	6	7	13

Table 5.4 describes details about the referral
 incident for the three police departments that made the most referrals across all sites, with data available for 132 individuals. (There were no data available from participating police departments for the Waynesville program or from secondary participating departments for the other three LEAD sites.) The data in this table include information for 55% of all the referrals that were made across all LEAD programs. Of those referrals, most (59%) were made during business hours for LEAD staff (between 9am-5pm). Most (67%) individuals who were referred between 9am and 5pm went on to enroll, compared to 33% of the people who were referred outside of those hours. This was especially notable in Fayetteville, where 72% of the people who went on to enroll had been referred during business hours, while 70% of those who did not enroll were referred outside business hours when a case manager was not available for a warm hand-off.

Forty-four percent of the 132 referrals shown in Table 5.4 were made during an encounter when a police officer responded to a medical or a behavioral-health related incident. However, the majority (58%) of those people did not go on to enroll in LEAD. There was variation across sites in the prominence of medical or behavioralhealth related incidents as the reason for police contact that led to referral. In Catawba (these incident report data were available for Hickory only) and Fayetteville, the reason for police contact was fairly equally distributed across the five identified referral circumstances, with only 31% and 27%, respectively, being referred following a medical or behavioral-health related incident. In contrast, the proportion of people who were referred when an officer responded to a medical or behavioral-health related incident in Wilmington was 64%, likely influenced by the practice of officers making referrals at all overdose reversal incidents. Thirty-one percent of the people who actually enrolled in LEAD came in contact with the referring officer when the officer was responding to a reported crime. In these

instances, the person referred to LEAD could have been a suspect or merely present at the crime scene (e.g., if drugs were found on one person but not the other, or if the police were responding to a domestic violence call).

5.1.B-3. Demographics of individuals referred and enrolled. Referrals and

enrollments varied substantially by sociodemographic characteristics (Figures 5.4-5.6). Across the sites, women accounted for an average of 33% of LEAD-eligible drug charges across jurisdictions but received 52% of referrals and represented 60% of program enrollments. Conversely, men accounted for 67% of LEAD-eligible drug arrests across jurisdictions, but received just 48% of program referrals. Men were also less likely to enroll than women, comprising just 40% of program enrollments. Referrals and enrollment also varied by race (Figures 5.5). Across jurisdictions, an average of 30% of community populations was comprised of Black individuals, yet they accounted for 44% of LEAD-eligible drug arrests. Where Black people were over-represented in drug arrests, they accounted for just 14% of program referrals and enrollments. White women were most likely to be referred and enroll in the program, representing 51% of enrollments; where Black men were least likely, representing just 7% of enrollments (Figure 5.6). Several factors could have contributed to the demographic differences in program referrals and enrollments—police referral practices, program eligibility criteria disproportionately excluding Black people because of criminal histories, and distrust of law enforcement among the Black community. (It is important to note that the drug charge data for people around the jurisdiction during the span of the program may have included people who would have been otherwise ineligible for the program due to criminal history.)

FIGURE 5.4 Referrals and enrollment by <u>sex</u>, comparisons by community census, jurisdiction-wide demographics, and LEAD-eligible drug arrests



FIGURE 5.5

Referrals and enrollment by <u>race</u>, comparisons by community census, jurisdiction-wide demographics, and LEAD-eligible drug arrests



FIGURE 5.6 **Referrals and enrollment by <u>race and sex</u>**, comparisons by jurisdiction-wide LEAD-eligible drug arrests



5.1.C. Facilitators and barriers for referrals and enrollments.

Program facilitators that increase referrals and enrollments

5.1.C-1. Fast and simple referral process encouraged law enforcement to make LEAD referrals.

Officers who participated in the focus groups and had made at least one LEAD referral reported that referrals were as fast or faster than making

QUOTE FROM LAW ENFORCEMENT:

"As soon as [an officer] can get on the phone and he can get there and we can fill out paperwork, it may be faster than a traffic stop. But there may be times where it's late at night or if you're...on an overdose...it could be a couple hours, but it's not any different than...what a normal call would consist of anyways." an arrest or calling another outside agency to respond (i.e., DSS). None of these officers said they were deterred by the amount of time it took to make a referral. To the contrary, they described the speed of the process as a reason why they made referrals and as a positive feature of the program. While officers mentioned several challenges they could encounter during the referral process, they also described the referral process as "simple" and "straightforward" when the referral process proceeded as intended. Many officers used a simple flow chart provided by the program to make a referral, which they found helpful and easy to use. Officers said that if more of their colleagues understood how efficient it was to make a referral, there could be more officer buy-in for utilizing LEAD.

5.1.C-2. Officers trained in community policing were more willing to make LEAD referrals.

Program partners and officers at one of the police departments in the Catawba LEAD program reported that garnering buy-in to make

QUOTE FROM LAW ENFORCEMENT:

"...you'll hear us refer to that a lot - the community policing aspect...I think the reason our program has been so successful, too, in a short period of time is...the type of people that we have here...our officers are truly that, trying to make a difference in people's lives... there really is a humanistic side to us. We really are very passionate about that."

LEAD referrals among frontline officers had been extremely successful. Officers and program partners working with law enforcement reported that they were pleased with the number of referrals the department was making and the number of officers who were participating. They all attributed this frontline officer buy-in to the heavy emphasis on community policing within their department culture. Law enforcement officers perceived that the community policing model at this particular police department was unique and differentiated their department from others. According to them, the emphasis on community policing created a more compassionate police force that was oriented toward looking out for and getting to know people in the community and being more aware of the forces that drive people to commit crimes. Officers credited these attributes that align well with the LEAD model for the significant buy-in within their department. Consistent with these qualitative findings, Table 5.1 shows that Catawba had the most average monthly referrals (3.2 per month) with this particular police department responsible for most of the referrals. Note: Community policing was not specifically mentioned by stakeholders at any of the other sites, though each has community-policing oriented programs and practices in place.

5.1.C-3. 24/7 warm hand-offs at scene of referral facilitated smooth referral process.

Catawba was the one site that reported consistently conducting warm hand-offs. The Catawba LEAD team made an intentional decision to have LEAD staff—either the program's case manager or mobile crisis, if after hours-travel to the scene of the referral to meet the officer and the person they referred. A primary objective in that practice was to avoid participants associating the case manager with law enforcement. Program partners and officers mostly noted that they were successful in that, and reported being pleased with the process and the number of referrals they yielded with the warm hand-off practice. However, one program partner raised the concern that, in some cases, confusion persisted for participants who continued to think case managers were law enforcement staff. Some officers noted that the process of waiting for the case manager or mobile crisis team to complete the warm handoff was familiar to them since it was similar to the way that law enforcement interacted with other agencies (e.g., DSS). Officers and program partners stated that having the after-hours mobile crisis resource almost always ensured a warm hand-off; only on rare occasions were both the case manager and mobile crisis team both unavailable.

5.1.C-4. Community-initiated referrals were helpful for reaching more people, including people who law enforcement may not have been targeting.

A community referral is a LEAD social referral that is initiated by someone who is not in law enforcement (e.g., a program partner, a family or community member, another LEAD participant, the referred individual). After the person is identified, a law enforcement officer meets with the individual to complete the referral process. Although it was not written in program policy and procedures, three out of four of the programs accepted community referrals. There was wide agreement across program partners that community referrals were useful and successful. Program partners reported that community referrals helped increase the number of referrals and helped reach potentially eligible individuals that the officers might not be targeting for referrals. For example, program partners at one site reported that community-initiated referrals reduced barriers to including more Black individuals and people who use crack and other non-opioid illicit substances. Many of the program partners and officers at the site that did not accept community referrals stated that they would like to have such a process.

Program barriers that reduce referrals and enrollments

5.1.C-5. Restrictive eligibility requirements prevented officers from making LEAD referrals to some people they thought could benefit from the program.

Across all sites, a subset of officers, program partners, and LEAD participants reported that program eligibility requirements were too limiting. They reported that their current criteria prevented the referral of some individuals who would otherwise be a good fit for LEAD, which may explain the relatively low number of average monthly referrals to LEAD (Table 5.1). Despite each of the programs having informally adjusted their policies to allow people on unsupervised probation to participate in an effort to be more inclusive, some officers expressed that current eligibility requirements nonetheless punished people for their probation status and criminal histories that were often by-products of their substance use. Relatedly, some officers explained they had made few or no referrals due to having little contact with people they perceived to be eligible. Some officers reported that the LEAD policy's eligibility requirements effectively limited their referrals to first-time offenders due to criminal history exclusions. Excluding people on probation in particular was perceived to deny LEAD to many people who would have been a good fit for and benefited from the program. The informal practice change of allowing people on unsupervised probation occurred on a case-bycase basis and was not an option known to all stakeholders.

5.1.C-6. Eligibility requirements disproportionately excluded Black people and men.

Some program partners and officers were concerned that eligibility requirements systematically excluded Black people and men from LEAD. They stated that Black individuals and men (and, in particular, Black men) were more likely to have a disqualifying criminal histories and probation status than White people and women, and that this might have been contributing to the unintended though systematic exclusion of those demographic groups.

Additionally, program partners shared concerns that some officers incorrectly believed that LEAD is only for people who use opioids, possibly because that was the initial goal of their program or because prior eligibility requirement restricted the program to people who use opioids. If programs focused only on individuals who use opioids for LEAD, that could have contributed to a disproportionate number of referrals of White individuals, possibly reflecting racial differences in the use of opioids across different communities.

The expressed views of program partners and officers on the limitations of LEAD eligibility criteria may help explain the disproportionate number of White women referred to and, ultimately, enrolled in all four programs (**Figures 5.4-5.6**).

5.1.C-7. Lack of officer buy-in contributed to under-utilization of LEAD by law enforcement.

Some program partners were concerned that the police departments involved with LEAD did not make as many referrals as they could, because a subset of officers did not fully buyin to LEAD's values and mission. Among some program partners, the concern about law enforcement buy-in was primarily focused on frontline officers who were tasked with making the referrals; and reportedly, only a handful of officers made referrals while the rest of the patrol force made none. Officers indicated that those who did not make LEAD referrals may also have thought and spoken negatively about the program. Other program partners noted a lack of buy-in among law enforcement leadership who may not be promoting the program within their departments. Regardless of whether lack of buy-in was attributed to leadership or frontline officers, program partners and officers identified two key attitudinal reasons behind it: 1) officer perception that LEAD referrals were outside the scope of law enforcement's role and 2) officer beliefs that LEAD and other harm reduction efforts were not valuable.

QUOTE FROM LAW ENFORCEMENT:

"We are cops, we are not service providers. We didn't create this person's problem. We didn't write the laws. The laws were written. They said, 'If somebody does this, it's illegal.' Somebody needs to take care of that. That's the cops. That's what I am."

Perception that LEAD referrals were outside the scope of law enforcement role. The vast majority of stakeholders, including those in law enforcement, agreed that some officers did not want to make referrals because they did not consider diversion or referrals a part of their law enforcement role. Program partners in law enforcement suggested that such officers felt they "entered this profession because they believe in law and order" or were more invested in "enforcing laws" than in "dealing with people's personal problems." LEAD may have been regarded as a "soft on crime" program and thus remained unpopular among officers who entered the field to "catch criminals" or who were expected to do so by a supervisor. By contrast, several officers and program partners indicated that LEAD-engaged officers view their role in society as extending beyond strictly law enforcement. A subset of program partners and officers reported that newer officers were more amenable to LEAD because it better aligned with what they perceived to be their role given recent changes in the scope of policing, especially the increasing presence of law enforcement during behavioral health crises.

Belief that LEAD and harm reduction efforts

were not valuable. Some stakeholders. including those in law enforcement, also stated that officers did not utilize LEAD because they did not believe the program could be successful. They noted that this view stemmed from a lack of understanding of addiction, substance use, and harm reduction. Several law enforcement officers explained that they were biased against people who use substances before they were educated in harm reduction and that they needed to gain a better understanding of addiction as a medical condition to see the value in harm reduction efforts like LEAD. Program partners remarked that officers did not typically get enough harm reduction and substance use training (in LEAD and other trainings, alike), which may have prevented them from embracing the value of LEAD. The most common suggestion for increasing buyin (expressed by 10 program partners and officers and in all four focus groups) was to use personal stories and statistics from their LEAD program to show officers that the program could be successful in their jurisdiction.

5.1.C-8. Lack of officer awareness about LEAD contributed to its under-utilization.

Program partners and officers reported that some of the police force lacked awareness of LEAD which, like low officer buy-in, led to the program's under-utilization. Officers may have lacked awareness because they were never trained in LEAD or had forgotten about it. Officers shared that it was easy to forget to use LEAD given there were insufficient reminders

QUOTE FROM LAW ENFORCEMENT:

"You know, it's not at the front of [every law enforcement officer's] mind. They are out there trying to stay alive."

or discussion about it within the department. Stakeholders also reported that turnover of the LEAD law enforcement representative, police chief, or other high-ranking champions of the program could contribute to the lack of awareness by LEAD becoming less prioritized in the police department. Program partners at two sites where high-ranking champions of LEAD had retired commented on the negative impact this turnover had on their referral numbers.

5.1.C-9. Referrals immediately postoverdose by law enforcement was a difficult time for people to understand, accept, and trust LEAD.

As shown in **Table 5.4**, a large proportion of people were referred to LEAD by an officer who was responding to a medical or behavioral health-related incident, which was most commonly an overdose. Program partners acknowledged that an overdose may be a good opportunity for a LEAD referral because it is a moment when someone may be scared about the risks of their drug use and more ready to accept LEAD. However, they also noted that the success of a post-overdose referral depended on its timing and the surrounding circumstances. Stakeholders reported that referrals immediately following an overdose reversal could be challenging, if not counterproductive, because the person who experienced the overdose could be disoriented, suffering from withdrawal symptoms, and opposed to interacting with law enforcement. This concern was most commonly raised in the Wilmington site, where officers perceived that they were required to make a LEAD referral at the scene of an overdose. This common understanding, though not a written policy, prevented Wilmington officers from

exercising discretion not to refer individuals in the immediate aftermath of an overdose. As expected, Wilmington had the largest number of referrals that occurred after a medical or behavioral health-related incident. Wilmington officers unanimously shared that requiring a referral at the scene of an overdose could be counterproductive since the individual was often hostile and unwilling to accept help, especially from an officer, at that time. The officers noted that other first responders who were present at the encounter may have been better suited to make the LEAD referral. Officers and program

QUOTE FROM LAW ENFORCEMENT:

"Maybe the best step is not to involve officers. Maybe the best step is just to involve the other first responders who are there on the scene who are not feared by these people who are overdosing...there is not going to be a mutual agreed upon relationship between us and these victims if we want to tell them [about LEAD] at the time of the overdose. It's always going to be a hostile interaction, especially once they're waking up from these overdoses."

partners at other sites shared that while overdoses were a good way to identify potential LEAD participants, they tried to follow up at a later time or to include the families of potential participants when discussing LEAD so that the conversation could be continued after the officer left.

5.1.C-10. Lack of warm hand-offs between law enforcement and LEAD staff may have prevented some follow-up and enrollment.

As shown in **Table 5.2**, only 50% of people who were referred to LEAD went on to enroll

QUOTE FROM LAW ENFORCEMENT:

"...if you're standing somebody face to face...and if you get that person when they're in that position where they [want to] have help it's an immediate, 'hey, in 10 minutes I can have you in front of a person that's [going to] help you.' But after hours, if you don't have a place to take them right then, I would say that the success rate drastically plummets..."

in the program. Many program partners and officers were concerned about this trend. They stated that their site's referral process may have led to people "falling through the cracks" or that the program "loses track" of potential LEAD participants after the referral. Program partners from Fayetteville, Wilmington, and Waynesville indicated that their programs did not consistently operationalize warm handoffs between law enforcement and LEAD staff during referrals. Some stated that they might lose fewer people and have more enrollments if they had a more systematic warm hand-off process, allowing LEAD staff to begin building rapport immediately. Immediate connection to LEAD staff could help address the following issues that they noted as contributing to the low conversion rate from referral to enrollment: 1) the person felt ready for support at the time of the referral encounter but not later, when LEAD staff followed up, 2) the person was hesitant to follow up after a referral because of a misperception that they would need to work with law enforcement, 3) the person gave the officer inaccurate contact information; and 4) the person was confused about how and when to follow up with LEAD staff after the referral.

5.1.C-11. Lack of clarity about referral process may have dissuaded some officers from making referrals and contributed to lack of follow-up after an individual accepted LEAD.

Some officers, program partners, and LEAD participants reported sometimes being confused about the procedure to be followed after someone accepted a referral (phase 2 of the referral process in Figure 5.2). These stakeholders noted a lack of clarity regarding how officers were supposed to transfer referral forms or make a warm hand-off, while LEAD participants shared their own confusion about what to do after being referred. Program partners and officers observed that some of this confusion and breakdown in communication could explain why some officers did not make referrals and why some referred individuals failed to complete the enrollment process. Different reasons for the confusion were noted. For example, program partners at one site reported having issues with referrals when both the case manager and the facility-based crisis center were unavailable. Program partners at another site reported confusion about who they should send referral forms to due to frequent turn-over in LEAD staff. Across sites, some program partners reported a lack of clarity about how to proceed after a referral when the case manager was not on duty and officers had to rely on a third-party provider that was also subject to limited capacity. Changes with these providers were not always known to officers. Even having had a visor card for their patrol car that instructed them what steps to take after-

QUOTE FROM PROGRAM PARTICIPANT:

"They didn't really offer me LEAD. They just wrote some stuff down. I didn't know anything about it. I came down here on my own. I didn't know I was in LEAD. I didn't know anything about this." hours, the process would not always proceed as intended. Program data were consistent with these observations. As shown in **Table 5.4**, 41% of referrals occurred outside of 9 a.m.-5 p.m., when LEAD staff members were least likely to be working and a warm hand-off was sometimes impossible. Further, more people who enrolled were referred between 9 a.m.-5 p.m. (67%) than those who did not enroll (50%).

LEAD participant attributes that affected referrals and enrollment

Stakeholders reported that there were individuallevel attributes associated with whether people who were referred went on to enroll in LEAD. Those attributes are considered to be contextual factors given the programs do not influence them directly. Program staff can, however, influence individuals' perceptions of the program, which also is associated with enrollment decisions.

5.1.C-12. Readiness to change affected an individual's decision to accept or decline LEAD.

A subset of all stakeholder groups (participants, program partners, and officers) indicated that the referred person's readiness to make changes to their substance use influenced whether they accepted the LEAD referral. Officers reported that a common reason people declined LEAD was that they were "not ready" and "don't want the help." LEAD participants also commonly described their willingness to accept a referral in terms of being "ready to stop getting high" or "to get better." Conversely, some LEAD participants stated that they had previously declined LEAD because they had not been ready to accept help. Stakeholders noted that people were most ready to change when they were at their "rock bottom" or the "end of their rope." One participant described accepting LEAD during a "window of opportunity of desperateness." These key moments of desperation could occur multiple times for one person, triggered by a variety of stressful and traumatic life events, such as a

QUOTE FROM PROGRAM PARTICIPANT:

"...that window of opportunity when you're desperate like I was, it's a small window. Like, somebody from [program partner agency] drove down, this is how God works, [I] just happened to be in [city of LEAD program] doing a syringe exchange the day I was willing to go get some help, and [they were] able to bring me back to [other city] and drop me off at the doors of detox. And then, I started my journey there."

negative encounter with police, an overdose, or a child being taken by DSS. Interviewees also noted that these moments of "readiness" could come and go quickly, and that timing a referral and its follow-up soon after one of these key events could potentially increase enrollment.

5.1.C-13. Trust in law enforcement affected an individual's decision to accept or decline LEAD.

Some respondents from each of the stakeholder groups reported that people who lacked trust in law enforcement were less likely to accept a referral. They indicated that many people who use drugs may have had negative interactions with or been harmed by law enforcement, and that they brought those experiences to every interaction with an officer, including at the time of the LEAD referral. Some program partners also expressed the opinion that Black individuals, compared

QUOTE FROM PROGRAM STAFF:

"A lot of people who use drugs or love people who use drugs have been extremely harmed by law enforcement. So, that partnership in itself causes a lot of people to really dislike [LEAD]." to those of other racial backgrounds, were less likely to accept LEAD due to greater distrust of law enforcement. In light of these problems, some officers suggested that law enforcement should not be a part of the LEAD referral process, especially in sensitive cases or circumstances, like immediately after an overdose. LEAD participants and outreach workers who formerly used drugs agreed and shared their own hesitations about working with a program that involves law enforcement, given their own or their community's experiences with officers. Some LEAD participants described feeling "weird" or "uncomfortable" joining a program that was offered by a law enforcement officer, and only later understood that police play a small role in the program. Officers and program partners described ways they tried to mitigate the trust problem and still have officers make referrals: One officer routinely explained to individuals when referring them to the program that the police officer's role in the program is very minimal.

5.2 LEAD staff engagement with LEAD participants and connection to supportive services

In **Section 5.1**, we presented findings about referrals and enrollments using program administrative data and stakeholder interviews. In the next section, we examine participant and staff engagement. A central expectation that underlies LEAD objectives is that program staff's engagement with participants will lead to better outcomes. In **Figure 5.1**, we depict engagement as having two components: building relationships with LEAD participants and making connections to supportive services. We present program data on engagement, including participants' use of services, and interview data on barriers and facilitators to engagement.

5.2.A. Variability in LEAD staff roles and expected engagement. The four LEAD

programs had different staffing procedures but similar expectations of engagement, services provided, and level of care offered. Waynesville and Catawba had a full-time LEAD case manager who was not office-bound. These case managers could visit LEAD participants in their homes or wherever was convenient for them and provide transportation. One of these case managers was employed by NCHRC and the other was employed by a mental healthcare service agency. The other two case managers, in Wilmington and Fayetteville, were office-bound and worked with LEAD as an added responsibility of their existing jobs as care managers for people who were on probation and used substances. These two programs also used peer outreach workers who had lived experiences with substance use and were not office-bound. One program employed its peer outreach worker part-time, while the other used peers from the overdose response team of a LEAD partner agency; these peers worked with LEAD as an added component to their existing job.

Although program staffing varied, program partners and participants described the LEAD participant experience very similarly across programs. There were no program obligations for engagement beyond completing the initial intake assessment; there was no end date for participation and no abstinence requirement. While there was no explicit or written requirement that LEAD participants engage in substance use treatment, some program partners reported that they expected LEAD participants to be engaged in some kind of treatment and working towards long-term abstinence.

Across the sites, LEAD staff mainly supported participants by providing harm reduction supplies, emotional support, and connections to external supportive services. To help participants connect to external services, a LEAD staff member could identify or make a referral to a service, work with the rest of the LEAD team to resolve a service barrier, advocate for LEAD participants when there were problems with a service, and transport and accompany LEAD participants to appointments when requested. Participants and program partners indicated that another major role of LEAD staff was checking in with participants regularly to see how they were doing and provide emotional support. What was meant by "regular" check-ins varied widely across staff and participants, from once a month to multiple times a day. LEAD staff and participants described LEAD staff being available for as much communication as the participant desired and working in a way that was "empathetic" and "non-judgmental." The level of emotional support and depth of relationship between staff members and participants varied but did not depend on whether the staff person was a case manager or an outreach worker.

Over half (52%) of the enrolled population had medium or high contact with LEAD staff, nearly one-third had low engagement, and 14% had one-time or no contact. High engagement is defined as regular in-person and/or phone communication, medium engagement as intermittent in-person and/or phone communication, and low engagement as very infrequent phone or in-person visits. No engagement refers to cases where the LEAD staff member had not interacted with the client after the intake assessment.

5.2.B. Level of engagement between LEAD participants and staff.

TABLE 5.5 Engagement level among enrolled participants

Characteristic	N = 121
Engagement level	
High	38 (2%)
Medium	26 (22%)
Low	38 (32%)
None	17 (14%)
Unknown	2

TABLE 5.6

Characteristic	Medium/High engagement, N = 64	Low/No engagement, N = 55
Gender		
Female	42 (60%)	28 (40%)
Male	22 (45%)	27 (55%)
Race		
Black	9 (53%)	8 (47%)
White	53 (54%)	46 (46%)
Other	2 (100%)	0 (0%)
Unknown	0	1
Age at referral, mean (SD)	32 (9)	33 (11)
Age at referral, (cat)		
18-35	43 (55%)	35 (45%)
36-50	19 (59%)	13 (41%)
Over 50	2 (25%)	6 (75%)
Unknown	0	1
Referral type		
Diversion	26 (49%)	27 (51%)
Social	34 (55%)	28 (45%)
Unknown	4	0

Engagement level among enrolled participants, by demographic and referral characteristics

Engagement level varied across sites, with medium to high engagement reported for 49% of enrollees in Catawba to 70% of enrollees in Wilmington. Of those enrolled in LEAD, a higher proportion of females than males had a medium or high level of contact with LEAD staff (60% vs. 45%) (**Table 5.6**). The proportion of Black and White individuals with medium or high levels of contact were similar. Average age of program enrollees at time of referral was 32-33 years and did not vary significantly across levels of engagement. While people who were referred by an arrest diversion enrolled more often than those with a social referral (**Table 5.6**), people referred by a social referral compromised more of the group that had medium to high levels of engagement with LEAD staff. 55% of people with a social referral went on to have medium/ high engagement, whereas 49% of people with a diversion referral went on to have medium/high engagement.

Type of services used by LEAD participants

TABLE 5.7

Expressed interest in services by participants at intake, and receipt during program participation (N=117)

Service	Expressed interest at baseline	Received service some time during program participation
Education/vocational training	42 (36%)	11 (9%)
Emergency shelter	16 (14%)	6 (5%)
Employment assistance/ employment	75 (64%)	29 (25%)
Food/clothing	31 (26%)	28 (24%)
Health care	35 (30%)	50 (43%)
Housing assistance	58 (50%)	21 (18%)
Harm reduction services (naloxone, syringe exchange, etc.)	7 (6%)	47 (40%)
Legal assistance	12 (10%)	13 (11%)
Mental health counseling	70 (60%)	55 (47%)
12-step programs	22 (19%)	23 (20%)
Obtaining ID	16 (14%)	10 (9%)
Other	37 (32%)	12 (10%)
Public benefits	23 (20%)	18 (15%)
Substance use treatment	79 (68%)	80 (68%)
Transportation assistance	25 (21%)	28 (24%)

To be formally enrolled in LEAD, participants completed a referral form with the referring officer and a baseline intake assessment with LEAD staff, which included questions about the type of services they needed and desired. Using intake assessment data and several other sources of program data, we identified all instances of documented service interest and utilization for 117 program participants. These data likely underestimate interest and utilization in different services among participants, as any instances that were not documented are not included here. The documented services that participants expressed most interest in at intake were employment assistance/ employment (64%), housing assistance (50%), mental health counseling (60%), and substance use treatment (68%) (**Table 5.7**). Substance use treatment (68%) and mental health counseling (47%) were the most commonly received services noted in program documentation. Comparatively fewer people were documented to have received employment assistance/employment (25%) and housing assistance (18%). (Notably, mental health and substance use services are generally accessible regardless of criminal history, where employment and housing services do most often impose justice-record-related restrictions.) While the smallest proportion of participants mentioned interest in receiving harm reduction services at intake (6%), interestingly, at least 40% of participants did want and receive such services some time later during their program participation.

Use of services by LEAD participants following LEAD staff referral

TABLE 5.8

Average number of different types of services used, referred to by LEAD staff

	Enrolled	Not Enrolled	Total (N=117)
Average number of service types used	3.6	0.4	1.8
Average number of service types used among those who used at least 1	4.8	3.2	4.5

On average, individuals who enrolled in LEAD used over three different types of services that they were referred to by LEAD staff (**Table 5.8**). (These data were self-reported by LEAD staff, and thus subject to recall bias and not exhaustive of all services that participants used, but rather just those that the LEAD staff had referred them to.) Among them, those who had any service use engaged at least once in nearly five different service types. Service use among individuals who were referred but didn't formally enroll in the program (i.e., did not complete an intake assessment) was low, though the few that did get assistance from LEAD staff in connecting to services had an average of over three different types of services that they engaged in. This is suggests that LEAD could be helpful to people who did not formally enroll, and that the flexibility for staff to interact with people not formally enrolled in the program was beneficial.

Reasons for periods of disengagement with LEAD staff

TABLE 5.9

Reasons participants disengaged with LEAD, among those with low or medium engagement

Disengagement reason	N = 64
Criminal justice involvement	1 (2.5%)
Drug use prevented engagement	12 (30%)
Family obligation or conflict	2 (5%)
Moved out of county	11 (28%)
No engagement desired	14 (35%)
Unknown	24

The most common reasons offered by LEAD staff for participants' permanent or temporary disengagement were no longer desiring engagement with LEAD (35%), being engaged in intensive drug use that made it difficult to maintain contact (30%), and moving away from the LEAD program's county and therefore being ineligible (28%) (**Table 5.9**). Less commonly mentioned reasons included criminal justice involvement, or family circumstances.

5.2.C. Facilitators and barriers to

engagement. Above, we presented findings on engagement with the LEAD program using data from the programs. In the section that follows, we present data from interviews with program partners and participants, and focus groups with law enforcement officers. As in the Referrals and Enrollment section, we distinguish between program factors, which are in direct control of the program, and contextual factors, which are not.

Program facilitators of engagement

5.2.C-1. Strong relationships between LEAD staff and participants promoted engagement with the LEAD program and external services.

Program partners and participants across all sites discussed the importance of strong relationships between staff and participants for LEAD to be consistent and helpful to participants. Strong relationships were said to be built through good rapport between participants and staff and could keep people engaged with external services like mental health and substance use treatment. LEAD staff discussed fostering strong relationships with participants

QUOTE FROM PROGRAM PARTICIPANT:

"What I like about the LEAD program is the availability of someone being there for you and not judging you. Especially when you're battling an addiction, a lot of people will look at you very differently without knowing the whole story...I was on drugs but I'm still a very good person and I'm still smart. But I made mistakes. Everybody makes mistakes, but they didn't treat me any different and they were there for me... they didn't give up on me." by providing emotional support, instrumental support (i.e., connecting participants to resources), transportation, or assistance with logistical needs, as well as by connecting with participants on shared experiences, such as their or a family member's experience with substance use. LEAD staff members with substance use experiences described how this common background enabled them to connect quickly and more deeply with participants; they viewed this as a helpful feature of the program. LEAD participants echoed this belief and stated that LEAD staff who shared their personal stories were a source of hope when they were struggling with substance use.

QUOTE FROM PROGRAM PARTICIPANT:

"...and [the CM] just comes to wherever I am...and talks to me, makes sure that he can see me to know that I'm okay instead of just seeing me [text] message it because it's different. I could [text] message it and really not be okay and not be in a safe place, but he just comes out and talks, asks what's going on, and stuff like that."

5.2.C-2. Field-based outreach by LEAD staff improved participant engagement.

According to each program's model, at least one staff member was "field-based," meeting with participants wherever in the community was convenient for them and providing transportation when needed. Stakeholders at all sites reported that having a staff member who was not office-bound and who conducted field-based outreach was essential for program success. Stakeholders described field-based work as a facilitator of engagement because it helped 1) locate people who failed to appear for their intake assessment, 2) locate participants who stopped engaging with program staff, 3) met people "where they are" with a harm reduction approach regardless of the setting (e.g., jail, hospital, home, etc.), and 4) provide

transportation. One of the LEAD programs, however, operated without a field-based staff member for many months due to staff turnover. Program partners, officers, and participants from that site all acknowledged the program had suffered as a result. They lost contact with many previously engaged participants and struggled with participant enrollment and engagement. Program partners and participants across sites described facing many of the same problems during phases of the COVID-19 pandemic when in-person visits were limited.

Program barriers to engagement

5.2.C-3. Inconsistent LEAD participant contact information made it difficult to sustain engagement between LEAD staff and LEAD participants.

Program partners discussed that frequent changes to participants' phone numbers or home addresses hindered consistent engagement. Some described that contact interruptions were especially common after an inpatient stay, incarceration, or periods when participants resided out of state. A few LEAD participants shared difficulties with maintaining an operational phone and reaching LEAD staff when they switched or lost phones. LEAD participants described losing access to phones not only due to financial challenges but also because they may have disconnected their number to separate themselves from drugpromoting social networks. Frequent changes in contact information could, in part, explain the finding that only 31% of enrolled individuals had a high level of contact with LEAD staff (i.e.,

QUOTE FROM PROGRAM PARTNER:

"..She had like five jobs or something, I don't know. She was just too busy...But she never had a working number, she was hard to communicate with." regular in-person and/or phone contact), shown in **Table 5.5**.

5.2.C-4. Challenges with LEAD staff turnover and capacity disrupted LEAD participant engagement.

New case managers who took over LEAD caseloads discussed facing barriers to sustaining the relationship participants had with the previous case manager. One case manager stated that all of his clients were referred after he took the position, indicating that nobody who was previously engaged continued with the program after the staffing transition. Several LEAD participants also reported challenges with LEAD staff turnover, stating that turnover could result in uncertainty about who to contact, and reduced comfort levels with and perceived support from new staff. Participants generally suggested the program should strive to lower turnover rates and improve communication around staff changes to avoid these interruptions.

QUOTE FROM PROGRAM PARTICIPANT:

"There's only one [LEAD staff] and I know they have 70-plus clients and that's a lot for one [person]...I mean there have definitely been days where I've called to just talk or needed to go get to an appointment...and [they] couldn't at that time because [they] had so much other stuff to do with other clients..."

A few program partners at the three largest programs, Fayetteville, Wilmington, and Catawba, described that LEAD staff sometimes had limited capacity to support participants. Program partners at two sites without full-time staff, Fayetteville and Wilmington, reported feeling limited in their ability to support participants. They described that participants would be better served by a dedicated staff member, which could increase the number of people who enrolled in and engaged with LEAD. The third site, Catawba, had a full-time dedicated staff member and a large number of active participants. Nevertheless, Catawba program partners and participants stated that the program could benefit from an additional staff member. LEAD staff also expressed concern about spending considerable time transporting participants, due to a lack of public transportation in certain areas, and at the expense of providing more direct support to the same or other participants. Because of a lack of capacity, LEAD staff had to make difficult decisions regarding whom to support and when, and some LEAD participants also spoke of these challenges.

5.2.C-5. Officer involvement in referral process may have had a negative effect on the relationship between LEAD staff and participants.

LEAD staff at two sites discussed struggling to build relationships with some participants because of participants' assumption that case managers worked with law enforcement. They described that establishing rapport and consistent engagement with some people was challenging because they lacked trust in the program following the initial interaction and referral from law enforcement. One LEAD staff member stated that it would be helpful if they were from the community, because people would understand that they did not work with the police. Supporting this point, another LEAD staff member noted that they could quickly build rapport with some participants because they knew some participants prior to their involvement in LEAD. A few participants also mentioned initially being confused about the relationship between LEAD staff and law enforcement; though, they did not comment on how this may have impacted their level of engagement. Individuals whose LEAD participation began with arrest diversion had lower engagement levels than those given social referrals (Table 5.6), possibly for having more closely associated LEAD staff and law enforcement and feeling distrustful.

5.2.C-6. Inconsistent and lack of information about LEAD obligations and expectations confused some LEAD participants and may have negatively affected their engagement with the program.

Many interviewed participants described confusion about the LEAD program that negatively shaped their program experiences and level of engagement. This confusion primarily derived from lack of or poor communication by LEAD program partners or referring officers, and appears to have been compounded by the perceived power dynamic between LEAD participants and stakeholders, leading some participants to be reluctant to ask for clarification. For example, one LEAD participant discussed not wanting to ask follow-up questions to resolve contradictions in information provided by a case manager and an officer; this person wanted to "not stir the pot" for fear of being charged. Moreover, LEAD participants mentioned that, at times, LEAD staff and officers gave contradictory information about LEAD. An example was

QUOTE FROM PROGRAM PARTICIPANT:

"It was odd having an officer actually be like, 'Hey, this could benefit you and we don't want you to be arrested, we want to help you, get you some help.' And that was just very weird. I was like, 'What?' That blew my mind... the whole situation really confused me and I think that was one of the reasons why I really didn't understand what was going on whenever [the LEAD staff] came out to the house. I didn't know who he was or what he stood for or anything like that, because I was so used to, 'Hey, you're going to jail'...I'd never heard of anything like that before."

confusion about what circumstances could lead to a participant's charges being reinstated, which may have affected the way they engaged with the program. Specifically, confusion arose regarding the following issues: 1) the purpose and goals of the program, broadly, beyond the specific services that were provided to the participants, 2) expectations of the program, particularly upon enrolling, 3) the range of services accessible through LEAD, 4) whether a particular staff member was part of LEAD, 5) program participants' status as active or inactive in the program, including confusion around whether they had completed or "graduated" from LEAD (although none of the programs have a formal graduation process or an end date); and 6) the legal ramifications of participating or not participating in LEAD. One person who was interviewed exhibited an especially high level of confusion about the LEAD program that may have wider implications in the LEAD participant population. This person was referred to LEAD immediately following an overdose reversal, and they reported being very disoriented during the referral, not knowing who to follow up with and when, and during the interview not understanding what LEAD was.

Factors perceived by some staff as facilitators and by other staff as barriers to engagement

Above we presented facilitators and barriers to participant engagement, but there was an additional finding, described below, that could not be classified as one or the other based on differing perspectives across program partners.

5.2.C-7. Stakeholders disagreed on whether lack of program obligations was a facilitator or a barrier to sustained engagement between LEAD staff and LEAD participants.

At all four sites, program partners described inconsistent engagement with certain LEAD participants. The program allowed LEAD participants to cease engagement for periods of time and then later reengage (i.e., have erratic engagement), and according to program policies and practices, there was no "end date" for a case. While some stakeholders expressed the expectation that LEAD participants should be in treatment or the belief that the goal of LEAD was to help connect people to treatment, when probed further, they all acknowledged that there is no true obligation for people in the LEAD program beyond completing the

QUOTES FROM PROGRAM PARTNERS:

Barrier:

"I feel like there should be just a little bit of 'Hey, you need to go back to your care manager on your appointed time'...That's just me, though. I know it's not required and I understand it. But...I feel like if you can't get in touch with them, they don't have to call you. You can't do follow ups. You can't make notes. All you can do is sit in a meeting and say, 'I don't know.""

Facilitator:

"I would rather have somebody using clean needles,...using condoms, and being safe, than all of those things not occurring because they don't feel like they have that kind of support. My goal, whenever we have somebody who comes in for syringe exchange, is to start that conversation to build rapport. Hopefully, at some point, they'll say, 'You know what? I actually like coming for treatment now.' It may not happen that first day, and that's okay. It may come six months down the road. But during that time period, maybe they don't ever get HIV or hep C, and they don't overdose."

initial intake assessment. Program partners expressed differing opinions regarding whether flexible engagement expectations after the intake assessment was a facilitator or barrier to sustained engagement; some stakeholders viewed it as both.

Lack of program obligations was viewed as facilitator because it adapted to the reality of LEAD participants' lives and helped meet their **needs.** Many participants and program partners regarded the norm of program flexibility as a positive feature of the program's connection with the LEAD participants, allowing LEAD staff to be an available support to participants regardless of the circumstances (e.g., relapse, incarceration, inpatient stays, unstable living situations due to domestic violence situations or other problems) and regardless of how long they had stepped away from the program. The fact that the program did not require participants to engage in activities (such as meeting regularly with LEAD staff, or requiring treatment) was viewed as a successful and empathetic approach to maintaining the long-term relationship between the LEAD participant and LEAD staff. It was also consistent with the value placed in the LEAD model on a harm reduction approach to case management. From this perspective, imposing expectations would be counterproductive to trust and rapport, and potentially discourage the LEAD participant from seeking help after a relapse or other disruption.

Lack of program obligations was viewed as a barrier because it led to a lack of

accountability. Some stakeholders asserted that the flexibility in program standards meant there was no accountability structure, which they believed contributed to LEAD participants being less likely to maintain sustained engagement. Some degree of concern about accountability was mentioned in interviews by at least one stakeholder at each site. While the extent of the concern varied, these stakeholders opined that LEAD participants should be required to take part in either a regimented treatment protocol or required check-ins with LEAD staff, given that LEAD programs were "going out of their way" to divert an arrested individual. Some of these stakeholders stated that if LEAD participants failed to meet these stricter obligations, the program should have had the option to reinstate criminal charges. The program partners and officers who expressed these concerns were also those who asserted that one of the goals of the LEAD program was to help people get into and stay in treatment; their desire for more accountability may have, in part, been driven by wanting to ensure LEAD clients participated in treatment. A number of police officers revealed in the focus groups that they had understood the goal of LEAD was to get people into substance use treatment; several of these same officers were concerned with the lack of program obligations.

Community contextual factors that impact LEAD staff engaging with LEAD participants and LEAD staff making referrals to services

In the following section we provide an overview of contextual factors affecting LEAD program operations and success, according to stakeholder interviews. Unlike program factors, these contextual factors are by definition not controllable by the LEAD program.

5.2.C-8. Availability and accessibility of services was variable and depended on the service, the site, and individual circumstances of the person in need.

Across all site locations, program partners stated that treatment resources for substance use and mental health (aside from detox) were often most available and notably more available than other resources that a LEAD participant might need. This finding is consistent with **Table 5.7**, which shows that the services most commonly received were substance use and mental health treatment. In contrast, program partners expressed their belief that affordable and suitable housing was the most needed resource and least available. Although treatment services were available, sometimes there may have been only one or two options for a given treatment type, which could pose challenges if that specific treatment type or agency was not suitable for a particular LEAD participant. LEAD participants and LEAD staff raised a variety of concerns about why some agencies were not well suited for all or some LEAD participants such as: 1) prior negative experiences with service providers, 2) unrealistic rules and regulations imposed by service providers, 3) eligibility requirements that were too exclusionary, 4) unaffordable services, and 5) lack of transportation to service agencies.

Additionally, while some services were technically available in the community, stakeholders raised concerns about waiting lists for services like treatment and housing. In the case of treatment, they noted that delaying a LEAD participant's connection to treatment could be problematic because once the service became available, the individual may not have been as "ready" as they had been when they initially made the decision to engage in treatment.

While stakeholders agreed that, for the most part, treatment options were available for substance use and mental health, program partners at three out of four sites reported that access to detox facilities was particularly problematic in their communities, either because there were long waiting lists, not enough facilities, too many people were turned away by the detox facility, or medical detox was not available. Stakeholders from the Wilmington site did not raise concerns about detox and, in fact, worked with a dedicated private detox facility that dedicated a number of beds to LEAD participants at no cost; multiple Wilmington stakeholders raised this as a major asset of their program.

5.3 Program administration of LEAD

In this section we present findings about the last of the three key program areas depicted in **Figure 5.1**, LEAD program administration, which encompasses program partner agencies' coordinated efforts to oversee all program activities, practices, and procedures at the time of implementation and thereafter.

5.3.A. Variability in program administration.

All four sites functioned similarly in that there were a set of LEAD partner agencies that signed a memorandum of understanding to collaborate on LEAD program activities. These partner agencies met regularly at "case staffings" to discuss LEAD participant progress and logistical successes and challenges. Some sites also had a Policy Coordinating Group, which met less frequently to discuss program policy and procedure. In addition to the LEAD staff (case manager and, for some sites, outreach worker), there was typically at least one representative from each program partner agency that attended meetings and coordinated the necessary LEAD program operations for their respective agencies. Partner agencies may have included behavioral health managed care organizations that managed and disbursed State funds to cover Medicaid-paid services and indigent care, detox facilities, mobile crisis services, police departments, behavioral health treatment agencies, and NCHRC staff. Partner agency representatives worked together to ensure the LEAD program was implemented consistently by officers and LEAD staff members. They also helped start their programs by writing or adapting policy and procedure documents, acquiring the necessary buy-in from their agencies and communities, and identifying funding or other support to implement the program.

Unlike the LEAD Support Bureau model, none of the NC LEAD programs we evaluated had a dedicated program manager to coordinate across agencies, so program administration responsibilities fell to the agency representatives and LEAD staff, with support from NCHRC, and in particular, the NCHRC law enforcement program manager who provided technical assistance to LEAD programs across the state. There were no significant differences across programs related to program administration, except for the degree to which NCHRC was involved with the program. NCHRC directly employed a LEAD staff member in the Waynesville and Fayetteville programs, and the NCHRC law enforcement program manager attended case staffings at all sites during implementation and would on occasion visit thereafter.

5.3.B. Facilitators and barriers to successful program administration. As with the other two key program areas already presented, our interview respondents identified facilitators and barriers to success in the program area of administration.

Facilitators to successful program administration

5.3.B-1. North Carolina Harm Reduction (NCHRC)'s technical assistance was instrumental to start-up and program success.

Stakeholders at all four sites considered NCHRC's assistance to be critical, not only for implementing their LEAD programs but also more broadly for bringing LEAD to North Carolina. NCHRC originated the idea to implement LEAD in North Carolina and was a key partner to the first program and the others that followed. NCHRC won grants to help key stakeholders travel to existing LEAD programs in Santa Fe and Seattle to learn from their experience and begin LEAD programs in NC; this travel support was received by at least two of the evaluation sites. At three of the four sites, the law enforcement leaders who helped

QUOTE FROM PROGRAM PARTNER:

"[NCHRC was] instrumental in providing training to us, to law enforcement, being a guiding force in helping us figure out how to design the program, how to implement it, policies, things of that nature." start their LEAD programs had a preexisting relationship with NCHRC from working with them to implement other harm reduction programs in their communities. Program partners at these sites credited this preexisting relationship and harm reduction efforts by the police department with making it possible to implement the LEAD

QUOTE FROM LAW ENFORCEMENT:

"If you would have been in that room... with those folks and their grandson, you would have said, 'This is why we need to let people know about this program.' Because I know they're not the only people out there that are sitting at home right now struggling with a family member in crisis who doesn't realize that there is a program we can get you into."

program in their communities. Program partners at all four sites stated that NCHRC provided them with invaluable technical assistance during program start-up and thereafter, including training for officers and program partners, sharing policies and procedures from existing LEAD sites, and providing regular assistance as challenges arose. The four program sites also learned lessons from each other, enabled by NCHRC sharing resources and knowledge across the sites.

5.3.B-2. Promotion of LEAD within the community increased buy-in for the program.

Some program partners at each LEAD site described promoting LEAD in their community by giving presentations about LEAD to key community stakeholders and publishing articles about LEAD in local media. Program partners indicated that active promotion of LEAD in their communities was important for start-up and the long-term sustainability of their programs because it helped create a culture of acceptance of LEAD in their communities, fostering community buy-in and awareness. Several program partners described the "groundwork" that was necessary in the community before the program started, in order for LEAD to be perceived positively when the program was fully implemented. Program partners mentioned that this was especially important in communities that were more conservative and possibly less politically aligned with the values of LEAD. Program partners described the importance of "selling" the program in targeted ways to make sure that the "pitch" was geared towards particular stakeholders or groups in the community. An example of such targeted promotion was informing business owners about the potential reduction of theft that could occur if the LEAD program were successful. Program

QUOTE FROM LAW ENFORCEMENT:

"...people from different informational silos and different experiences collaborate on this person...this intensive case management, that's the secret sauce. You get everybody around the room...everybody is there and everybody has got their little piece of information. When you put them all together, you get a fuller picture about what is going on with this person, and maybe we start to understand why they haven't returned text messages in the last two weeks...So, it's just this wealth of information that we can make operational decisions on the basis of, and that really doesn't happen. Cops rarely talk to nurses, rarely talk to mental health providers, rarely talk to EMS folks. We're not talking to each other. This system requires that you see the benefits of it."

partners across all LEAD sites stated that they would welcome greater community awareness of LEAD and believed continuing promotion of LEAD with tailored information for particular stakeholder groups was a good path forward to building awareness and buy-in.

5.3.B-3. Regular case staffing meetings were essential to successful program administration and LEAD participant success.

"Case staffings" (also known as, Operations Work Group meetings) were regular meetings in which all program partners gathered to discuss LEAD participant updates, as well as to address issues related to program logistics. Program partners overwhelmingly expressed the belief that regular case staffing meetings were instrumental to program success. While some stakeholders provided minor feedback for how the meetings could be more successful, no one who was interviewed expressed an overtly negative attitude toward the case staffings and, with the exception of one individual, every person interviewed indicated that they viewed these meetings as worthwhile despite their busy schedules. In fact, program partners expressed their regard for the case staffings as unique and special meetings, with numerous people in attendance who brought varying life and work experiences to the challenging collective work of LEAD. They stated that this collaboration was uniquely beneficial to the LEAD participants. Stakeholders described how they engaged in collaborative problem-solving about obstacles LEAD participants faced, identifying available resources to meet participants' needs, and searching across agency records to help locate LEAD participants or LEAD referrals when staff were not able to locate them (i.e., checking jail/ prison database and MCO database).

The case staffing was the only regular opportunity for all LEAD partners to gather. In addition to discussing updates for each LEAD participant, they also addressed issues with program logistics and implementation. For example, if law enforcement made a referral that did not reach the LEAD staff, the case staffing was an opportunity to discuss how to prevent the logistical mishap in the future. Some stakeholders also noted that since they volunteered their time to LEAD, the meetings were their only LEAD duty; without the meeting, LEAD could be ignored or forgotten. For such stakeholders--often those working in the local prosecutor's office or with an administrative role at a partner agency--the meetings kept them informed about LEAD, provided an opportunity for them to weigh in on logistical issues, and expanded their understanding about how to support people who use substances in their community.

Barriers to successful program administration

5.3.B-4. Lack of available funding affected program partners' ability to implement LEAD with fidelity.

The most often mentioned barrier to successful program administration was the struggle to acquire funding for LEAD staff and/or LEAD participant needs. As a result, the LEAD programs had to alter the original LEAD model to fit their unique circumstances, thereby hindering their ability to implement LEAD with full fidelity to the program's original design (see Section 1 for more information on national model). The programs managed their funding challenges in different ways. Fayetteville and Wilmington programs relied on LEAD partner agencies' existing staff to fill the needs of the LEAD program; LEADrelated duties were added to their primary job duties, which could take priority over LEAD work. Although these sites were able to create a LEAD program with the available resources, some program partners reported that the lack of full-time LEAD-dedicated staff constrained their program. Program partners at both sites explained that not being able to work full-time on the LEAD program affected enrollment and

QUOTE FROM PROGRAM PARTNER:

"Funding was always a problem. We knew we didn't have any additional money, so every time there was an issue that came up...we're down in the weeds, just like, 'Well, how do we get people transportation to their treatment?'...'Well, we don't have funding for that'...I actually refer to LEAD staff as unicorns, because there were no such things...There was no grant money available for LEAD staff at that time...So, the funding was this huge issue...we were always searching for how to pay for something."

their ability to support the LEAD participants. The Catawba program received a grant to support the case manager's position, but funding was not sufficient to compensate an additional LEAD staff member or others working for the LEAD program (i.e., a program coordinator or other program partner representatives who take on administrative tasks). Moreover, program partners and LEAD participants at this program stated that their case manager was operating beyond capacity. The lack of funding at these three sites led most people involved in those LEAD programs to describe their work for the program as a second or third job, or as "volunteering" their time. The fourth program, in Waynesville, struggled to meet participants' treatment needs in their rural geographic region, with very limited services, and few low-cost or free services. Several program partners indicated that the lack of funding available for the LEAD program required them to depart from staffing recommendations of the LEAD Support Bureau model, and may have detracted from program success.

SECTION 6: Summary of Results and Conclusions

LEAD had the most significant benefit for the people who were well engaged with the program, meaning they had consistent contact with LEAD staff after referral to the program.

In general, our analyses of administrative data demonstrated that participants who were well engaged with the program had 1) fewer citations and arrests and 2) increased utilization of outpatient behavioral health services after their referral to LEAD and as compared to people who were referred but had very little to no engagement with the program. We also found that crisis-related service use was lower among individuals enrolled in the program than what would have been expected if they had not enrolled, though this finding was not statistically significant. Conversely, rates of crisis-related service use were generally higher than expected among those who were consistently engaged with program staff, suggesting that group may have had greater need for those types of services and were successfully connecting to them.

While it appears that the program most benefited people who had consistent (medium or high) engagement with LEAD staff based on the outcomes findings, there is evidence from the stakeholder interviews that people benefited from the LEAD program in ways that went beyond criminal justice involvement and service utilization, including along all dimensions of recovery capital. In particular, program staff and participants both reported that LEAD participation was associated with important improvements in social capital via supportive relationships with program staff, and physical capital given increased access to resources, including both harm reduction tools and treatment services. Stakeholder interview data also revealed that small positive changes experienced as a result of being in LEAD made their involvement worthwhile, even in the absence of the larger, life-changing outcomes the program sought to foster. A closer examination of how these improvements in recovery capital may have led to benefits in the longer term was not possible with the data available, and should be further explored.

Although our evidence suggests the program was beneficial for those with medium or high engagement with LEAD staff, that level of contact was not experienced by all LEAD participants. Among those who enrolled in any of the four programs (n=121), just over half (52%, n=64) had medium or high contact with LEAD staff. The other half of participants who had low engagement likely did not experience as much of the program's intended benefits.

Our interview data revealed many factors, both during the referral process and thereafter, that could affect whether someone referred to LEAD went on to enroll and then engage consistently with LEAD staff. We found that the initial encounter with the law enforcement officer and circumstances of the referral appeared to shape subsequent enrollment and engagement. Specifically, individuals who were referred by an arrest diversion were more likely to enroll in LEAD than individuals referred via a social referral, but less likely to have high or medium contact with LEAD staff once they enrolled. The gualitative data indicated possible mechanisms for this phenomenon, including 1) arrest diversion carried a threat of being charged if one did not accept and enroll in LEAD despite a lack of desire to be in the program, and 2) arrest diversions may have created a misperception among some prospective participants that LEAD staff were employed by law enforcement agencies, which could have decreased trust and subsequent engagement. Both scenarios could also explain why people who were referred via a social referral sometimes did not go on to enroll-without the threat of a criminal charge there may have been little motivation to participate in a program they perceived to be connected with law enforcement. We found several other logistical factors during the referral process that may have prevented enrollment and reduced engagement, including lack of consistent warm hand-offs between law enforcement and LEAD staff, referrals made immediately postoverdose, and officers describing LEAD in a way that mistakenly suggested greater obligations and expectations than simply completing the intake assessment.

In addition to the circumstances of referral, there are other ways that LEAD program operations and the availability of services influenced a LEAD participant's level of engagement with the program. LEAD participants and program partners discussed risk factors for participant disengagement, including turnover in LEAD staff, periods of time when no field-based LEAD staff were available, or lack of capacity to meet participant needs due to LEAD caseload size or other work requirements. Additionally, there appears to have been significant overlap between LEAD participants' perception of the LEAD program and their perception of non-LEAD community services to which they were

connected via LEAD. Some participants mistook staff members from community service agencies to be LEAD program staff, and related concerns about those service staff members as negative observations about LEAD. Other participants, as well as program partners, described disengagement by LEAD participants following a negative experience with a service provider or when they were not able to access the services they need. Participants and program partners shared a wide range of concerns related to availability of services in their geographic areas. A closer examination of the connection between program engagement and the availability and accessibility of local services should be further explored, especially for programs in rural areas.

Although we were able to identify many programmatic and environmental reasons that could discourage enrollment and engagement, the reason most often cited by all stakeholder groups for lack of interest in the program or disengagement was the individual LEAD participant's lack of "readiness." Readiness was defined in many ways depending on the stakeholder, with some defining it as readiness to accept help, readiness to engage in treatment, or readiness to stop drug use. The importance placed on individual readiness suggests a treatment and recovery expectation and appears inconsistent with the harm reduction philosophy of LEAD embraced by all four sites. According to program policies and procedures, there were no actual obligations or expectations for accepting help, engaging in treatment, and achieving recovery-related change. Therefore, the only type of readiness that was actually relevant was basic interest and readiness to interact with LEAD staff. A foundational pillar of harm reduction is the development of nonjudgmental, person-centered relationships that meet the person exactly where they are, without imposing expectations of abstinence or treatment participation. Within this trusting relationship, the person is free to seek help with reducing harms associated with their drug use, and need not involve committing to try treatment or make any other changes. Based on comments made

by LEAD participants and program partners, there may not have been a unified vision across stakeholder groups about what the expectations and obligations were or should have been for the program. These differences could have introduced confusion for LEAD participants about program requirements and affected enrollment and engagement. For example, someone may have disengaged because they believed treatment participation was expected or required, when in reality it was not, according to program policies and procedures. Based on our finding of a beneficial association between engagement with LEAD staff and individual participant outcomes-for both criminal justice and treatment related outcomes-we will present several recommendations in Section 7 to address challenges related to enrollment and consistent engagement.

We found evidence that the number of people referred was likely shaped by three additional factors: officer buy-in, narrow eligibility criteria, and demographic inequity. Although some officers valued the program highly and were proactive in making referrals, others were reportedly either not aware of the program or not convinced of its value and made no referrals. By contrast, some officers were constrained from making as many referrals as they wanted to, because some people they considered to be good candidates for LEAD were disgualified due to program eligibility criteria (e.g., no supervised probation allowed or history of disgualifying convictions). Both of these circumstances resulted in fewer people being referred to the program than most stakeholders desired. Additionally, administrative data and interviews with program partners indicated a disproportionate number of White women in the program compared to the larger population of people in the community who were charged with LEAD-eligible drug charges. Based on the data we had available, we could not determine the reason for the inequity, but program partners were aware of it and offered the following as possible reasons that White people and women were overrepresented in all programs: restrictive

eligibility requirements, officer referral practices, misunderstanding among law enforcement that LEAD is only for people who use opioids, and a more pervasive lack of trust in law enforcement among Black people. Additionally, while the flagship LEAD program in Seattle was developed to address racial inequities, this goal is not explicitly reflected in any of the NC LEAD program policies and procedures, nor was it mentioned in the interviews as a formal goal for any of the LEAD programs. The overrepresentation of White women could also be related to programs not explicitly seeking to use LEAD as a way to address racial inequities in drug arrests but instead to connect people to treatment services and reduce justice involvement.

Stakeholders consistently reported wanting to extend their programs' reach to refer and enroll more people—and a more diverse group of people-both to support more individuals and have a greater systemic impact. A challenge to meeting this goal was the shortage of funding for LEAD staff and for no- or low-cost services and resources in the programs' respective communities. There were concerns at all programs about the existing capacity of LEAD staff and program partners, as well as future funding streams to support LEAD. Therefore, in order for the LEAD programs to continue to grow, and maintain fidelity to their own LEAD models and achieve full fidelity to the LEAD Support Bureau model, acquiring additional funding may be necessary.

Additionally, we found that LEAD programs often developed their models and programs based on the funding and other resources available to them in their local contexts. Two of the four programs, Catawba and Waynesville, were able to allocate funds to implement the LEAD program with a staffing model similar to what is proposed in the LEAD Support Bureau model, i.e., with a full-time case manager who is field-based. Program partners, officers, and participants at the Catawba site were largely pleased with their program, in terms of LEAD staff support, program partner relationships, officer buy-in, and the number of referrals and enrollments, and expressed the least concerns related to logistical implementation challenges. Many program partners and LEAD participants attributed the success of the program to LEAD staff's personal attributes, the case management field-based and harm reduction-centered model, the expectation for warm hand-off at every referral, and a community-based policing culture that supports police officers using LEAD. The other program with a full-time field-based case manager struggled to succeed, not due to a lack of staff funding, but instead because of the local context. With the lowest number of participants across the evaluation sites, the Waynesville program faced a variety of challenges that prevented its growth. These challenges were related to funding for treatment and other external services, and sparse transportation and service availability in its rural setting, which may have contributed to inconsistent buy-in by law enforcement agencies and possibly the greater community.

While both enrollment and strong engagement were relatively low across all the sites, both criminal justice and service utilization program outcomes were promising among participants who were well engaged. A focus on increasing appropriate referrals, facilitating enrollment after referral, and supporting engagement could translate to both program expansion and scaling up of beneficial outcomes.

Key Points

- Participants who were well-engaged with the program often had 1) fewer citations and arrests and 2) increased utilization of outpatient behavioral health services after their referral to LEAD and as compared to people who were referred but had very little to no engagement with the program
- Program staff and participants reported that LEAD participation was associated with important improvements in social capital via supportive relationships with program staff, and physical capital given increased access to resources, including both harm reduction tools and treatment services
- LEAD stakeholder groups all expressed strongly valuing their programs and wanted to expand their reach
- However, only 50% of those referred went on to enroll, and just over half of program participants had strong engagement with program staff

- Program partners reported the following barriers to making more program referrals: narrow eligibility criteria, low officer awareness or buy-in to the program
- Reported barriers to enrollment after a referral included misunderstanding among some prospective participants that there were treatment expectations, and limited capacity of program staff (e.g., not always being able to conduct warm hand-offs)
- Expanding program eligibility, ensuring consistent warm hand-offs from law enforcement to program staff, and allowing community referrals in addition to those made by law enforcement could help scale up programs and their benefits for community members who use drugs

SECTION 7: Key Recommendations

Overall, our findings demonstrate positive outcomes for people who engaged with LEAD across all sites. Further, all stakeholder groups strongly valued their programs and viewed them as successful despite implementation challenges and concerns that limited the number of people who were referred, enrolled, and engaged with the program.

To address some of the implementation challenges, we identified a set of recommendations for the four LEAD evaluation sites to improve their program operations and for other future or existing LEAD sites to consider.

We developed the recommendations by identifying the key barriers and challenges that the programs faced, and drew upon two sources to identify solutions to those challenges:

1 stakeholder feedback from the qualitative data

2 the LEAD Support Bureau model to consider how closer alignment to the national model may help programs achieve their objectives.

Below is a list of recommendations, with a rationale for each and references to report sections that motivated the proposed recommendations.

The recommendations are divided by program area—**Referrals** and enrollments, Engagement, and Program administration.
Referrals and enrollments

Conduct comprehensive data collection during referral process and compare demographics of individuals referred to LEAD to community demographics.

For all four programs, white women were disproportionately represented in referrals and enrollments. At the time of data collection for the evaluation, the LEAD programs were only consistently tracking referrals to LEAD when the officer offered LEAD to someone who was eligible and that person accepted LEAD. In order to better understand the driving forces behind the racial inequities in referrals and enrollments, we recommend the programs track the demographics of 1) people who officers wanted to refer but could not due to eligibility requirements, 2) people officers offered LEAD to but who declined the referral, 3) people who are charged with LEAD eligible charges but were never offered LEAD, and have officers document their discretionary decision regarding whether or not to make a LEAD referral. With regular data collection, programs can identify demographic groups that are underrepresented in referrals and enrollments, and develop focused efforts in referral practices to close those gaps.

For more information on the key process evaluation findings that informed this recommendation see: Referrals and Enrollments-**5.1.C-5**, **5.1.C-6**, **5.1.C-13**, and **Figures 5.4-5.6**.



Establish eligibility requirements that are as inclusive as possible of individuals who use drugs and could benefit from the LEAD program.

When all four programs were implemented, program partners chose to create eligibility requirements that were more restrictive than the original eligibility requirements proposed by the LEAD program in Seattle, in an effort to adapt the model to what they thought would be acceptable in their communities. However, a range of stakeholders reported wanting the eligibility requirements to be more inclusive of people in their communities who could benefit from LEAD, but were, at the time, ineligible. According to stakeholder feedback and the LEAD Support Bureau's guidance, we recommend the eligibility requirements be reconsidered to be more inclusive (e.g., allowing supervised probation, allowing a wider range of past convictions, shorter time frames for disallowed convictions), with a goal of expanding the number of referrals and making them more equitable.

For more information on the key process evaluation findings that informed this recommendation see: Referrals and Enrollments **5.1.C-5**, **5.1.C-6**, and **Figures 5.4-5.6**.

Integrate regular efforts to increase officer buy-in and awareness about the program.

Stakeholders from all LEAD sites reported wanting better buy-in to the program among law enforcement officers. Program partners and officers provided valuable feedback on ways that police departments can increase buy-in and awareness: 1) Provide training about harm reduction, substance use disorders, and LEAD for every new officer, 2) Conduct refresher trainings with regularity on similar topics for all officers already trained in LEAD, 3) Provide officers information on LEAD outcomes for their specific LEAD programs, 4) Update officers on the progress and well-being of the people they referred, 5) Obtain support by high ranked and highly-respected officers who can regularly promote the program, 6) Promote one-on-one conversations and mentorship between officers who make LEAD referrals and those who do not. We recommend that LEAD programs integrate these efforts regularly and consistently to achieve a widely valued goal by program partners and officers of improving buy-in and increasing referrals and enrollments.

For more information on the key process evaluation findings that informed this recommendation see: Referrals and Enrollments **5.1.C-7**, **5.1.C-8**, and **Table 5.1**.



Allow community referrals that do not involve law enforcement.

Stakeholders at sites that allowed community-initiated referrals believed they were successful, and in the one site that did not include them, program stakeholders expressed wanting to expand referrals in that way. In 2020, the LEAD Support Bureau (LSB) changed the criteria for who could make LEAD referrals to include LEAD staff and community members in an effort to expand the referral process and referral inclusiveness. For community referrals, LSB recommends that they should be both "community-initiated" and not involve any direct contact between law enforcement and the person being referred. In those cases, law enforcement would continue to check whether the individual met

eligibility criteria to participate. These community referrals are meant to be an addition to referrals made directly by law enforcement, rather than a replacement. In line with the LSB changes and many of the program barriers we identified (see list below), we recommend the LEAD programs create an option for LEAD staff and community members to make LEAD referrals without law enforcement involvement.

For more information on the key process evaluation findings that informed this recommendation see: Referrals and Enrollments **5.1.C-4**, **5.1.C-7**, **5.1.C-8**, **5.1.C-9**, **5.1.C-13**; Engagement **5.2.C-5**.



Create a post-overdose referral protocol where the referral is made soon after an overdose, but not at the time of an overdose reversal.

Representatives from all stakeholder groups raised concerns about officers making LEAD referrals immediately after overdose reversals,

given individuals' heightened stress, confusion, and vulnerability. However, stakeholders also reported that people were more likely to accept a LEAD referral at times of desperation or crisis related to their drug use, and therefore, postoverdose (though not at the scene) was a good opportunity to make a LEAD referral. Therefore, in order to improve the likelihood that people with particularly high-risk drug use can connect with LEAD, we recommend that programs track drug overdoses in their communities and create a protocol for making referrals, ideally by case managers or outreach workers, to LEAD-eligible people in the days following their overdoses.

For more information on the key process evaluation findings that informed this recommendation see: Referrals and Enrollments **5.1.C-9**, **5.1.C-10**, **5.1.C-12**, **5.1.C-13**, and **Table 5.4**.

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Create process for all referrals, regardless of time of day, for a reliable warm hand-off between the referring officer and a facility or LEAD staff person.

In order to address challenges raised by stakeholders related to participants not following-up to enroll after referral, and officer confusion about the steps of the referral process, we recommend programs create a clear and consistent process and expectation for warm hand-offs for all referrals. The site that was most successful and that demonstrated the least amount of confusion in the referral process had LEAD staff responding during business hours and LEAD-affiliated mobile crisis staff responding after-hours. In both scenarios, staff arrived at the scene of the referral (rather than law enforcement transporting the person to the case management agency).

For more information on the key process evaluation findings that informed this recommendation see: Referrals and Enrollments **5.1.C-1**, **5.1.C-3**, **5.1.C-10**, **5.1.C-11**, and **Table 5.1**.

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Provide officers and other people who make referrals accurate messaging to communicate about the expectations and goals of LEAD.

Some officers and program partners considered LEAD to primarily be an opportunity to get people into treatment. It is possible that some officers with that perspective may have communicated that with prospective participants at the time of the referral, potentially causing reluctance to accept the referral and enroll in the program among people who were not treatment ready. Participants also reported confusion about what they understood to be requirements and expectations of the program. We recommend that each program develop clear and consistent

information, and talking points or scripts, about LEAD to be communicated at each referral, namely that aside from the initial assessment, there are no expectations of engagement, but that there are harm reduction, treatment, and social services available to the participant if and when they want them.

For more information on the key process evaluation findings that informed this recommendation see: Engagement **5.2.C-5**, **5.2.C-6**, **5.2.C-7**; Referrals and Enrollments **5.1.C-12** and **Table 5.1**.

LEAD staff engagement with program participants



As possible and when needed, provide LEAD participants access to free cell phone services.

A common problem raised by LEAD staff and participants was that phone contact with participants could be unreliable due to interruptions in service or intentional changes in phone numbers, which then led to periods of unintended disengagement with the program. Conversely, consistent engagement with LEAD staff was reported to increase the likelihood that LEAD participants stayed engaged with external supportive services and treatment services and thus should be prioritized. We recommend that LEAD staff

connect program participants to free cell phone services, as possible and as needed, or that the LEAD programs use discretionary funds to pay for cell phone services early on in working with LEAD participants who are at high risk for disengagement.

For more information on the key process evaluation findings that informed this recommendation see: Engagement **5.2.C-1**, **5.2.C-3**.



Create a process for outgoing LEAD staff to introduce all LEAD participants to incoming LEAD staff when there is staff turnover.

During the course of this evaluation, there was staff turnover at all LEAD sites. (See **Appendix A** for incidents of staff turnover on program timelines). Staff turnover affected consistent participant engagement by causing confusion among some participants about who they should contact, and also presented a challenge for participants for having to establish and rebuild rapport with the new staff person. We recommend that programs plan for overlap in employment for the outgoing and incoming LEAD staff member, to the extent possible, with the outgoing LEAD staff personally introducing the incoming LEAD staff to all the engaged participants for a more seamless transition.

For more information on the key process evaluation findings that informed this recommendation see: Engagement **5.2.C-1**, **5.2.C-4**.

Establish a maximum number of participants per caseload for full-time and part-time LEAD staff to avoid burnout and to ensure participant needs are met.

Some participants reported not having sufficient access to LEAD staff, and LEAD staff described not always having enough time to devote to LEAD participants. Large caseloads and LEAD staff having limited time to dedicate to working with program participants due to other work responsibilities contributed to staff not having the capacity to meet all participants' needs. Consistent engagement with LEAD staff was associated with positive outcomes for LEAD participants. With that, we recommend that programs establish a maximum number of participants per staff caseload to help optimize frequency and quality of engagement with participants. More program funding may be required to support staff salaries for new hires (additional case manager or outreach worker).

For more information on the key process evaluation findings that informed this recommendation see: Engagement **5.2.C-4**.



Include field-based LEAD staff in program operations at all times.

According to stakeholders, proactive, field-based outreach was essential to successful LEAD programming given it facilitated the enrollment process, consistent engagement between the program and LEAD participants, and participants' engagement with external supportive services. Stakeholders reported that periodic lapses in field-based staff had a negative impact on engagement with participants. We recommend

that contingency plans be developed to maintain field-based outreach if and when there is an absence or turnover among staff that are not office-bound.

For more information on the key process evaluation findings that informed this recommendation see: Engagement **5.2.C-2**.



Hire an independent program manager.

NCHRC's technical assistance was instrumental to start-up and sustainment of all four of the evaluation sites' programs, demonstrating that support from an independent agency can help programs succeed and operate effectively. To extend that beneficial effect, programs should ideally hire a full-time program manager that is independent from program agencies, to help ensure that collectively-developed program priorities and practices are sustained. A dedicated program manager would also support consistent implementation of program administration activities (e.g., acquiring funding, and promoting LEAD in the community) but that current program partners may not have sufficient time to undertake

given their other work responsibilities. A program manager could also work to address referral and engagement barriers that were identified in this evaluation, such as confusion about referral process across stakeholder groups, inconsistent communication about the program to LEAD participants, and a lack of data collection for tracking programs' process and outcome metrics.

For more information on the key process evaluation findings that informed this recommendation see: Referrals and Enrollments 5.1.C-11; Engagement **5.2.C-6**; Program Administration **5.3.b-1**, **5.3.b-2**, **5.3.b-4**.

Create a comprehensive racial equity plan that addresses and names racial equity as a goal of the program.

When program partners at the four evaluation sites implemented their LEAD programs, they were committed to broadly reducing criminal justice involvement among people who use drugs in their communities. However, unlike the flagship LEAD program in Seattle, none of the sites explicitly addressed racial equity in their policies and procedures, nor was it endorsed by program partners in the qualitative data. In line with guidance from the LSB, we recommend that programs develop an actionable plan for reducing criminal justice-related racial inequities in their communities. Programs should engage community members in the process of creating the plan, and involve local leaders and organizations who are also committed to addressing racial inequities in the sites' communities. These same community members should continue to be involved in the LEAD program, ideally as members of Policy Coordinating Groups to ensure that racial equity continues to be a program priority. Tracking demographics at each stage of LEAD programming (referral→enrollment→engagement), as described in Recommendation 2, will be essential for evaluating the extent to which racial equity goals are achieved.

For more information on the key process evaluation findings that informed this recommendation see: Referrals and Enrollments **5.1.C-4**, **5.1.C-5**, **5.1.C-6**, **5.1.C-13** and Figures **5.4-5.6**

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Engage community members in LEAD to increase and sustain support for the program.

Each of the evaluation sites had presented and promoted their programs to the community via media channels and meetings with key community stakeholders. Continuing and bolstering these tactics would help increase program visibility in the community. We also recommend that programs solicit direct involvement from various community groups in their LEAD policy meetings (such as described in Recommendation 13). The LSB recommends involving business associations, colleges and universities, advocacy groups, social circles and families of LEAD participants and other people in the community who use illicit drugs. Community awareness and support of LEAD is essential if the referral process is expanded to include community members. Greater community knowledge and support of LEAD can also have downstream benefits on improving officer buy-in and potential LEAD participants' willingness to accept the LEAD referral when offered.

For more information on the key process evaluation findings that informed this recommendation see: Program Administration **5.3.B-2**.



Refer to the LEAD Support Bureau website and fidelity framework.

The LEAD Support Bureau (<u>https://www.lead-bureau.org</u>) has many resources to help guide program implementation, policy, and practice,

including a model fidelity framework that can be accessed <u>here</u>.

SECTION 8: Appendix

APPENDIX A

Program timelines for the three operational evaluation sites







APPENDIX B Logic Model for NC LEAD Programs and Duke Evaluation Plan



Qualitative:

from key stakeholders

Perspectives on program implementation and outcomes

APPENDIX C

Data management, data limitations, and analysis methods by quantitative data type

C-1. Criminal justice involvement data.

Data management. The evaluation team assigned an offense category, charge type (misdemeanor, felony, or infraction), and class (indicating level of severity) for all criminal charges in order to characterize offenses and determine the most serious charge for a given event. A set of crime offense categories were defined, and all charges were coded by two people and assigned one category (see below for complete set). In cases where the criminal event had more than one charge associated with it, charge type, class, and category were used to identify the most serious charge, and that charge then represented the arrest for assignment to an offense category. Felonies were selected over

misdemeanors; misdemeanors were selected over infractions. When the charges had the same type, the charge with the most severe class was chosen. In cases where charge type and class were the same, charges from violent categories (misdemeanor and felony violent) and drug categories (drug possession, drug paraphernalia, and drug manufacturing and sales) were selected over other categories.

and then systematically coded for key topics and emerging themes. Through analysis of the coded segments for each code, broader themes were identified.

Offense categories: drug manufacturing or sales, drug possession, drug paraphernalia possession, DWI, motor vehicle, property crime, prostitution, technical violation, weapons possession, violent misdemeanor, violent felony, other crimes against a person, other minor crimes, other felony crimes **Data limitations.** There are several limitations for the criminal justice data. Given the data only came from North Carolina databases, any charge or incarceration that occurred out of state were not captured in our analysis. There is also the potential for human error given that data from CJLEADs and NC Department of Corrections copied into a spreadsheet by a police department employee and evaluation team members were not able to work with the databases directly. Finally, one site did not include any DWI or motor vehicle charges in their data share and thus we are missing these charge categories from one site.

Data analysis. We used a pre-post design to compare rates of charges, arrests, and incarcerations before and after the index date over short (6 month) medium (9 month) and long (12 month) time frames. This was done for each site individually and for the pooled data. We made pre-post comparisons for each of the comparison groups described in **Section 4.1**. To evaluate how group designation was associated with the rate of the outcomes of interest, we used Poisson regression with average treatment effects among the treated (ATT) weights and an interaction term between exposure group and study period (pre vs post index date).

As described in **Section 4.1**, we evaluated a variety of criminal justice and healthcare utilization outcomes. As mentioned above, motor vehicle and DWI charges were not available consistently across sites. For that reason, the results displayed in the criminal justice findings in this report omit those charges from all sites, so that they can be directly compared. However, all charges (including motor vehicle offense charges or DWI charges) are included in the pooled data.

The data were structured so that every participant had two rows. There was a period variable that indicated whether the row referred to the pre- (period=0) or post-(period=1) period. Within each row, there were variables representing the number of

outcomes experienced in each time frame (e.g., arrest180 is the number of arrests the participant experienced in the six month period designated by the period variable). There was also a person-time variable indicating how many eligible days the person contributed during that period, because incarcerated time was dropped (e.g., persontime180 is the number of days the participant was in the community and available to experience outcomes during that period). The log of person time was used to convert model counts to rates per personday, which we then multiplied by 180 to get six month rates. In general, person-time was right censored at December 31, 2020, though in Fayetteville we used July 1, 2019 because that is when the program lost their LEAD staff member. Only people who had complete follow up data (e.g., 6 months of follow-up data for the 6 month models) before July 1, 2019 were included for Fayetteville. We used generalized estimating equations to account for withinperson repeated measures. In the site-specific analyses the ATT weights included sex, age, race, type of referral. In the pooled analyses, we also included an indicator for each site in the weights to control for unobserved site-specific variables. The models compared similar time frames pre- and post-referral (e.g., for the 6 month models, we compared rates in the 180 days pre-referral to rates in the 180 days postreferral). If the interaction term was statistically significant (<0.05), we concluded that we had detected evidence of an intervention effect. Notably, in the pooled data, this approach does not fully account for within-site clustering. Where there is substantial variation between sites, the pooled models may not fully account for that finding. This will be addressed in future academic publications.

To display results, we used the model described above to provide adjusted pre-rates, post-rates, and expected post-rates under the assumption that the intervention group would experience the same relative change as the comparison group from the pre- to post- period. The expected rate is calculated as follows:

Expecte	d rate =
LAPCCIC	u raic –

(Rate in the intervention group, pre-period) x (Rate in the comparison group, post-period)

Rate in the comparison group, pre-period

Using an interaction table, this is expressed as expected rate = C*B/A. This can be compared to D, the observed rate.

	Pre-period	Post period
People with low or no LEAD engagement	A	В
People with med or high LEAD engagement	С	D

C-2. Behavioral health service utilization data

Data management. The MCO data management departments utilized the company's database to collect and deliver service dates, medical service codes and descriptions, and costs for all services used by people referred to LEAD. The evaluation team used the code descriptions and internet resources to determine what type of service each medical billing code was associated with and developed a codebook that was used to classify the code by service categories in SAS statistical software (see below for full set of categories).

Service categories: Assertive Community Treatment (ACT), behavioral health clinic visit, behavioral health evaluation, behavioral health hospital stay, community support services, detox, emergency room, facility based crisis intervention, family therapy, group living, group psychotherapy, MAT, mobile crisis, multisystemic therapy (MST), intervention, outpatient substance use disorder treatment, peer support, psychotherapy

Data limitations. The most significant limitation for the behavioral health service utilization data is that it is unknown whether people included in the analysis were eligible to be covered by LME/ MCO services or not. When there was an absence of service utilization for a given individual, it is unclear whether they did not utilize any services, were not covered by the LME/MCO because of private insurance coverage or self-pay, or utilized services outside of the LME/MCO catchment

area. The evaluation team does not have reliable information about when people moved in and out of the LME/MCO catchment area or periods of private insurance use, and thus the observation period cannot be limited by periods of lack of LME/MCO coverage. An additional limitation is that service providers may use different medical codes for the same service. While the evaluation team attempted to group all service codes into the correct service category, without seeing the full clinical report, it is impossible to be certain the category was correctly assigned. Finally, as mentioned above, detox events were measured differently for one site. Instead of LME/MCO covered detox services, we only included detox events that occurred at one private facility that is a LEAD program partner and covers many LEAD participant detox stays. Therefore, these detox data should not be directly compared with other sites' detox data because they include self-pay and privately insured detox events and is only limited to one facility.

Data analysis. See description of criminal justice involvement analysis.

C-3. LEAD program documentation data

Data management. All program documentation was reviewed and select variables of interest were identified. Whenever possible, relevant details contained in the program documentation was extracted systematically and entered into structured spreadsheets. The spreadsheets were then cleaned and coded for future analysis. However, in cases where documents involved lengthy narratives that could not be condensed further without meaningful loss of information, those documents were not processed further prior to analysis.

Data limitations. There are some limitations to the program documentation data. Specifically, not all sites recorded the same data or used the same forms. Moreover, due to turnover among LEAD case managers, data may have been collected and maintained differently from one staff member to another, even within the same site. In some cases, there was significant data loss because of inconsistent or incomplete recordkeeping or because forms were completed by hand, which made data extraction more challenging.

Data analysis. In an effort to extract useable information from the qualitative data in the program documentation, evaluation team members read through a subset of LEAD participants' comprehensive case files, including all structured and unstructured program documentation to determine what data were available, relevant to the evaluation questions, and/or provided important context for participants' experiences in the LEAD program. Structured variables were generally transformed and extracted systematically into spreadsheets; however, the process to transform unstructured data was more complex. Preliminary variables of interest contained in the unstructured data were identified through an iterative process based on their ability to capture relevant details of participants' experiences and circumstances as they entered and progressed through LEAD. These preliminary variables were then used to code participants' case files and, as needed, variables were added and refined throughout coding. After the final variables were established, all LEAD participant case files were recoded. Each participant's case file was coded by two evaluation team members using REDcap and discrepancies in coding were resolved through consensus. The final product of this process was transformed qualitative data entered into a structured spreadsheet and the final quantitative variables were analyzed and descriptive statistics were created using R statistical software.

C-4. LEAD participant engagement data

Data limitations. There are several notable limitations for the participant engagement data. The first is recall bias of the LEAD staff members who may not accurately recall level and type of engagement they had with past and current participants. Two of the LEAD staff who were included in the data collection process had not worked for LEAD for several months when the data were collected. While they appeared to remember many things about the LEAD participants, there is even more concerns about recall bias for these two staff members. Also, because of frequent turn over for LEAD staff at some sites, it was impossible to collect data from all people who worked with each LEAD participant so there is likely missing information about some LEAD participants for some sites. Additionally, while the evaluation team attempted to standardize the question that asked about level of contact (none, low, medium, high) through very detailed instructions about what type of contact would be included in each level, there was likely some variability in the way the LEAD staff interpreted the levels.

C-5. Qualitative Data Management and Analysis.

All recordings of the stakeholder and participant interviews and law enforcement focus groups were first transcribed and de-identified and then analyzed using a coding scheme specifically developed to maximize the utility of each dataset. Details on each analytic step are provided below.

Transcription. All interviews were audio recorded and then transcribed by a professional transcription service. To ensure the confidentiality of all evaluation participants, the transcripts were de-identified by research assistants. All de-identified transcripts were stored on a secure server at Duke University School of Medicine.

Developing the coding system. In order to develop the coding system for each dataset, two members of the Duke evaluation team read

through each subset of data, wrote detailed memos to reflect on content and identify key themes across each dataset. The information generated through this process was then used to create a draft codebook containing these identified themes. The codebook was finalized with input from the entire evaluation team and comprised both theory-driven themes and themes that emerged directly from the narratives and discussions. Codes were refined until all relevant themes were adequately represented.

Coding. Each dataset was coded using its respective final coding scheme. The team of coders was trained in qualitative analysis and in the proper application of codes by senior members of the evaluation team over several training cycles in which the same sample of transcripts was independently coded. Next, any discrepancies were identified and coders were provided with written and verbal feedback to clarify disagreements on the application of the codes. Finally, the data were divided among the coders and independently coded. All coding was completed in

Nvivo, a qualitative analysis software. The coded transcripts were reviewed by senior team members to confirm consistency, and discrepancies were resolved through team consensus using an iterative process and regular evaluation team meetings.

Identifying broader themes. In order to understand the broader patterns contained in each of the datasets, senior evaluation team members used the general framework for thematic analysis (Braun & Clarke, 2006) to review each of the coded segments categorized under a particular code. Particular attention was paid to the codes relevant to understanding the implementation and outcomes relevant to LEAD. The overarching goal of thematic analysis was to identify themes and understand the nuances and processes that emerged directly from each dataset. All coded segments were annotated and examined for patterns by clustering them into broader conceptual themes. Conceptual themes were refined until all subcategories were adequately captured and represented.

APPENDIX D Recruitment strategy and data limitations for qualitative interviews

Recruitment strategy for program partner

interviews. Interviewees were recruited through the regular LEAD case staffing meetings, which were attended by the Duke evaluation team. The evaluation team offered the opportunity to complete an interview to anyone present at these meetings. Stakeholders opted to participate in the interview at the time of the meeting or contacted the evaluation team at a later date. The evaluation team attempted to interview representatives from each LEAD program partner agency at each LEAD site and followed-up with agencies by phone, email, and in person, accordingly.

Data limitations for program partner interviews. The outbreak of COVID-19 presented several problems for collection of stakeholder interview data, which may have resulted in unintended data limitations. First, the interview data were collected over a longer time frame than was originally intended, with interviews held both prior to and after the COVID-19 outbreak. As some interviews were conducted in person and some virtually, the two different modes of interviewing could have yielded different levels of disclosure in terms of how stakeholders reported on their programs. However, in general, no such differences between interview types were identified.

Law enforcement officer focus groups. At each

evaluation site, the LEAD law enforcement coordinator was asked to invite up to 7 officers who had made at least one LEAD referral to participate in the focus groups. Any officer wishing to attend the focus group could participate. The Duke evaluation coordinator then worked directly with the LEAD law enforcement coordinator to schedule the focus group at a convenient time for officers and that minimally disrupted police agency's operations. Due to recruiting constraints, one site's focus group was comprised of officers who were not actively making referrals to the program.

Data limitations for officer focus groups.

Participants for the focus groups were identified by the LEAD law enforcement representative, and therefore bias could have been introduced as to which officers were selected for participation. For example, the representative may have been more likely to invite officers who had made more LEAD referrals, were generally more supportive of LEAD, or who had particularly positive experience as part of the program. Moreover, as with other data collected over the course of the evaluation period, the outbreak of the COVID-19 pandemic presented several problems for collection of focus group data. First, focus groups were held both prior to and after the COVID-19 outbreak. As focus groups were conducted both in-person and some virtually, these circumstances may have resulted in different levels of disclosure in terms of how officers discussed their programs.

Recruitment strategy for LEAD participant

interviews. Recruitment of LEAD participants for the evaluation was facilitated by LEAD staff who worked closely with LEAD participants. The Duke evaluation team provided LEAD staff members with a brief script to introduce the evaluation to the LEAD participants and assess their interest in participating in the interview process. Before March 2020, LEAD case managers and outreach workers assisted interested LEAD participants in scheduling and arriving at in-person interviews with the Duke study team. After March 2020, interested participants were given the option of reaching out directly to the evaluation team to schedule the virtual interview, or having a LEAD staff member share the participants' contact information with the Duke evaluation coordinator. The evaluation coordinator then followed-up directly with the LEAD participant by phone or email to schedule the interview.

Data limitations for LEAD participant inter-

views. The original goal for holding interviews as part of this evaluation was to conduct them in person and in whatever location was most convenient to participants, to be completed by Spring 2020. However, in three of the evaluation sites, high turnover and/or low staffing resulted in the postponement of participant interviews. Twelve interviews were conducted in person before the COVID-19 pandemic began, at which point in-person interviews were untenable, and the remaining 10 interviews were conducted virtually. It is likely that virtual interviews created barriers to participation for LEAD participants who did not have access to necessary technology or a private space to conduct the interview. Additionally, the Duke evaluation team noted that many LEAD participants who initially agreed to complete a virtual interview did not ultimately do so, possibly because they had less support from case managers to adhere to their scheduled commitments. The challenge of recruiting and conducting interviews with participants as part of this evaluation mirrored a wider issue encountered by LEAD staff, who described challenges in reaching and engaging LEAD participants as program activities were moved online. While all participants who were referred to the evaluation coordinator were contacted, it was not possible to track how many people declined participation in the interview process when the LEAD staff offered the opportunity, nor was it possible to track how many LEAD participants expressed interest in the interview process but never followed-up with the Duke evaluation team. It is likely the recruitment process along with challenges presented by conducting the interviews after March 2020 resulted in a biased final sample of LEAD participants who completed an interview. Specifically, we expect that the interviewed participants, as a whole, were likely generally more engaged in LEAD and may have had more access to resources such as technology and private spaces that allowed them to participate in the evaluation.

APPENDIX E Site-specific referral and enrollment trends



Fayetteville

Catawba



Note: Values are shown as 0 in December 2020 due to the end of our data collection, not zero referrals and enrollments.



Wilmington

Waynesville



SECTION 9: References

LEAD evaluations/studies

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SECTION 10: Glossary

Arrest diversions: When a law enforcement officer makes a referral to LEAD for an individual who uses drugs and is actively engaging in low-level unlawful conduct at the time of their encounter, and the referral is made in lieu of arrest.

Behavioral health services: Refers to services that support mental health and/or substance use needs.

Behavioral health treatment agency: Clinical organizations that provide treatment services to people with mental illnesses and/or substance use disorders.

Case manager: Individuals who accept a referral to LEAD are connected to the LEAD case manager who conducts an intake assessment (or participant has a comprehensive clinical assessment), monitors progress, and acts as a liaison between program participants and other program staff and outside service providers.

Case staffing: Refers to regular meetings (often bi-weekly or monthly) among staff from LEAD partner agencies to discuss LEAD participants' status and progress, and to discuss logistical successes and challenges about program processes. (Described by the LSB as operations work group.)

Crime analyst: A police department employee who collects and analyzes crime reports, arrest records, incarcerations, police calls, and other data for general department reporting, and also to track LEAD participants' criminal justice involvement.

Enrollment: After a person has been referred to LEAD and determined to be eligible, they are referred to the LEAD case manager for an intake assessment within 14 days of referral. Once the intake assessment is completed, the individual is considered to be enrolled in the program. (Level of engagement with program staff and services once

enrolled can vary considerably across participants.)

Harm reduction: A set of supports and resources aimed at reducing the harms associated with drug use, by reducing high-risk drug use practices (e.g., via services like syringe exchange) and also by reducing harms experienced by people who use drugs, both in the community and the criminal justice system.

LEAD documentation: A variety of forms and notes on LEAD participants that are used to assess needs and to track participants' status and progress.

Law Enforcement Assisted Diversion (LEAD): A pre-arrest community-based criminal justice diversion program for people who use drugs and engage in (or at risk of engaging in) low-level criminal activity to sustain their drug use. LEAD allows law enforcement officers to refer these individuals to the program in lieu of arrest.

LEAD evaluation coordinator: The member of the Duke research team who: coordinated evaluation tasks; coordinated and managed data collection from site partners; conducted interviews; contributed to study design, instrumentation, and analysis; and contributed to report writing and dissemination of evaluation results.

LEAD evaluation team: The group of researchers at Duke University School of Medicine—including faculty, postdoctoral associates, research analysts, and research assistants—who conducted the evaluation.

LEAD Support Bureau (LSB): The LEAD Support Bureau responds to the national demand for strategic guidance and technical support to local jurisdictions that are implementing LEAD programs.

LEAD participant: Individuals who enroll in the LEAD program.

LEAD staff: Staff at agencies involved with the LEAD program who work directly with LEAD participants (i.e. case managers and outreach workers).

Local management entities/Managed care organization (LME/MCO): An organization that is responsible for managing and disbursing the State's Medicaid and indigent-care funds for behavioral health services in the LME/MCO's geographic catchment area.

North Carolina Harm Reduction Coalition (NCHRC): A statewide grassroots organization dedicated to the implementation of harm reduction interventions, public health strategies, drug policy transformation, and justice reform in North Carolina and throughout the American South.

Office-bound: Refers to LEAD staff who only meet LEAD participants at their offices and not in the community.

Outreach worker: Program staff, often with their own lived experience of substance use, who engage in field-based outreach to program participants and other disadvantaged members of the community.

Outcome evaluation: Measures LEAD program outcomes among participants, and to a lesser extent among program partners and the community. Primary outcomes of interest are changes in participants' criminal justice involvement and behavioral health service utilization associated with LEAD, as well as self-reported program effects by participants.

Post-referral observation periods: Refers to the period of time we track participants' CJ involvement and service use after having been referred to LEAD, time frame ranging from 12 months to 3 years, depending on when the participant enrolled.

Process evaluation: Examines several dimensions of program implementation, practice, and process to identify facilitators and barriers to programming as intended, ultimately informing a set of recommendations for program adaptations to maximize its success.

Program administration: LEAD program partner agencies' coordinated efforts to oversee all program activities during implementation and ongoing operations.

Recovery Capital Framework: Recovery from substance use disorder is affected by one's access to various kinds of resources; supportive friends and family, money to pay for treatment and other needs, job skills and training; and an ability to adhere to dominant cultural norms. Possessing these assets or types of "capital" improves an individual's likelihood for successful recovery. The framework organizes these key personal and social resources into four dimensions, or forms of "capital": social, physical, human, and cultural capital.

Social referrals: Referral by law enforcement officers, other program staff, or community members to LEAD for an individual who uses drugs and has a history of or is at risk for engaging in low-level unlawful conduct but made at a time when there is no probable cause for arrest. Under the original LEAD model, "social contact referral" is limited to police officers only; in this report, "social referral" reflects an adaptation made by NC LEAD programs regarding who can make initial referrals, expanding it to program staff or community members, made in coordination with law enforcement officers.

Field-based: LEAD staff members who work out in the community and proactively engage with program participants where they are rather than participants going to staff offices for appointments.

Qualitative data: Non-numerical, often written data, such as the transcript of an interview.

Quantitative data: Numerical data, or anything that can be counted or measured. This could be the number of times a person was arrested, or their score on a quiz.

Warm hand-off: After a referral is made and accepted, the law enforcement officer coordinates with the case manager to meet in the same physical location with the new participant to complete intake forms. A warm hand-off may take place at the referral location, the case manager's office, or another location (e.g., police department, hospital, or crisis center). Sometimes the officer transports the individual to the case management office; ideally, the case manager arrives at the referral location to then travel with the individual to the office, minimizing law enforcement's involvement and avoiding police car transport.