



Final Report

Implementation Evaluation of Roca, Inc.



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Executive Summary

Roca, Inc. is a non-profit organization serving high-risk young men and mothers, ages 17-24, with sites in Chelsea, Springfield, Holyoke, Boston, and Lynn Massachusetts, as well as in Baltimore, Maryland. In this report, we provide results from our three-year implementation evaluation of Roca's Intervention Model with high-risk young men at the four main Roca sites in the Commonwealth of Massachusetts: Chelsea, Springfield/Holyoke, Lynn, and Boston¹.

The period of performance for this evaluation is April 1, 2018 to March 31, 2021. This period includes the coronavirus (COVID-19) pandemic and resultant shut-down of non-essential activity which began around March 15, 2020. To understand the impact of the COVID-19 pandemic on Roca's participants and operations, we conducted telephone interviews with Roca leadership, including the directors of each Roca site. During these calls, we learned that Roca was deemed an essential service by the Commonwealth and did not shut down its programming. However, the communities that Roca serves are among the hardest hit by the pandemic, and like most other aspects of social life, Roca had to rapidly adjust to operating safely within the pandemic context. Throughout this report, when applicable, we discuss the impact of the COVID-19 pandemic on Roca's model, Roca's participants, and our evaluation.

Research Questions

The primary research questions (RQs) this evaluation addresses are:

1. How is Roca's Intervention Model being implemented at each site?
2. What are the characteristics of the young men that Roca serves?
3. What is the level of engagement among young men in Roca?
4. What are participants' experiences with Roca?
5. What do Roca participants' employment and recidivism outcomes look like?

Data Sources

Data for this evaluation come from a variety of sources. To answer RQ1, we conducted on-site observations at each of the four main Massachusetts sites² and conducted informal interviews with Roca staff while on site. All observations were completed in 2019. To answer RQ2-5, we analyzed self-reported data from a Roca participant survey we conducted in the fall of 2020 and conducted statistical analyses using Roca's Efforts to Outcomes (ETO) performance management program data and CORI data provided by the Department of Criminal Justice Information Services (DCJIS) in the Commonwealth of Massachusetts.

Overview of Key Findings

Implementation of Roca's model at each site (RQ1)

- The core elements of Roca's Intervention Model that frame our evaluation are relentless outreach, transformational relationships, stage-based programming, engaged institutions, and performance-based management. Within the time period of our evaluation, but after we conducted our observations, Roca shifted their framework to reflect the incorporation of CBT into the model.

¹ Participants in Roca's Central American and young mothers programs as well as at the Baltimore, MD site were not included in the scope of this evaluation.

² We did not conduct an on-site observation of the Holyoke site.

The new framework comprises four tenets within which the core elements are organized: creating safety and stability which incorporates *relentless outreach* and *transformational relationships*; teaching life-saving skills which incorporates the new trauma-informed *CBT* curriculum; practice skills, relapse, and repeat which incorporates *stage-based programming*; and engaged institutions and systems which incorporates *engaged institutions*. *Performance-based management* continues to be an underlying element of Roca's execution and monitoring of this framework.

- Overall, three of the core components of Roca's model — relentless outreach, transformational relationships, stage-based programming — are embedded in the culture and front-line operations at each site. The engaged institutions component of Roca's model appears to be implemented primarily by site leadership and so our observations of this component were limited. When we did observe Youth Workers engaging with institutions outside of Roca, it was primarily in the service of referral and support for the young men on their caseload, rather than the critical work of systems change being executed by site leadership.
- The factors that influenced variation across Roca sites included the physical Roca building, the communities and young men being served, site leadership, and staff availability for specialized programming (such as culinary). Commonalities across sites included the use of the red flag system for conducting relentless outreach, the presence of social activities for developing transformational relationships, and the teaching and practicing of material for developing employment, education, and life skills. Youth Worker style or preference and contextual issues of the community they are serving influenced how the core elements of Roca were implemented. Such variation demonstrates the flexibility of the model to fit the need to adapt to local contexts.

Characteristics of the young men that Roca serves (RQ2)

- Our findings generally support Roca's focus on highest risk young men with greatest needs; however, there is variation in risks and needs by site:
 - Young men from Boston and Lynn have more extensive and serious criminal histories than their counterparts from Chelsea, Springfield, and Holyoke.
 - Young men at the Boston site are most likely to be Black or African American, while the young men at all other sites are most likely to be Hispanic/Latino.
 - The rate of having a high school degree or GED is lowest in Holyoke.
 - Young men in Lynn are more likely than young men in other sites to have had past employment, and young men in Holyoke more likely to have no recent employment history.
 - There are more fathers or expectant fathers in Holyoke, Springfield, and Lynn.
- While there is substantial variation in participant characteristics by site, the typical Roca participant is a young Hispanic/Latino man of 21 who has had six arrests, at least one felony charge, and prior convictions, incarcerations, and community supervision sentences. He is gang- and drug-involved and has been arraigned for violent and weapons offenses. He has no employment history, no high school degree or equivalent, lives with his family, and requires various forms of public assistance.
- Self-reported risks and needs collected through the participant survey generally correspond to those recorded in ETO, but there are some nuances. For example, survey results suggest that a larger percentage of young men had some sort of employment than is officially captured in the ETO data. One reason for this discrepancy could be that the wording of the survey question does

not time-limit prior employment, so some respondents might have counted sustained employment from well before their engagement with Roca.

- Understanding site variation in participant characteristics is crucial for understanding and reporting overall patterns in Roca’s data since there may be factors that skew overall results.

Participant engagement and experiences with Roca (RQ3 & RQ4)

- Overall, average monthly contacts are slightly less than the standards developed by Roca for Youth Workers, which may reflect the difficulty some Youth Workers have in reaching their young men on a consistent basis or it may be a result of the high caseloads we observed; young men in Boston generally participate in less programming and other Roca activities than young men at the other sites; and over half of all young men have no TEP enrollments. Consistent with our observations of site differences in TEP (see section 3.2.3.3 – Stage-based Programming), Boston had lower rates and numbers of TEP enrollments than the other sites.
- A history of justice involvement has some relationship with engagement:
 - Enrollment in TEP is lower among participants who have a drug offense history and monthly Youth Worker contacts are lower among individuals with a higher number of previous self-reported arrests.
 - Program attendance is lower for individuals with a drug or weapons offense history.
 - With the exception of violent and drug offenses, increases in any other type of criminal justice measure are linked to fewer days engaging with Roca.
- Recent (within the past 6 months) or current employment is related to lower engagement. This finding may speak to lower-than-average levels of risks and needs among individuals who are or have been recently employed, and therefore have a lessened reliance on Roca programming to fulfill those needs.
- On average, young men are continuously engaged with Roca (i.e., did not disengage for longer than 30 days) for approximately two years.
- From a list of options for engaging with Roca, survey respondents selected that their Youth Worker and feeling safe at Roca are reasons they engage, although there is some variation in these findings by site. With respect to needs, respondents also said they engage with Roca because they need help with something employment-related, finding housing or shelter, and/or obtaining SNAP benefits, a service we only observed in Springfield.
- The most common reasons young men indicated that they stopped engaging with Roca were that they got arrested or incarcerated. However, this self-reported finding does not necessarily mean they were dismissed from Roca because of those arrests or incarcerations.
- Most survey respondents said they were very satisfied with Roca.

Roca participants’ employment and recidivism outcomes (RQ5)

- Employment:
 - Programming and Youth Worker contact are linked to increased odds of and reduced time to unsubsidized employment. Almost 40 percent of Roca participants have obtained unsubsidized employment. The rate of unsubsidized employment varies dramatically by site, with the lowest rates in Holyoke (17%) and the highest rates in Lynn (48%). These

findings may reflect the high unemployment and poverty rates of Holyoke relative to the rest of the Commonwealth. Individuals in Boston have a much higher likelihood of employment than young men in other sites, a factor likely due to greater opportunity.

- **Recidivism:**
 - The rates of convictions and violent convictions are relatively consistent across sites, except for Holyoke, which has a low rate of both.
 - TEP enrollment associated with a lower likelihood of any new conviction and a violent new conviction. For example, participation in TEP reduces the odds of violent recidivism by 66%).
 - Three-year recidivism rates among high-risk young adults who participate in Roca are lower than statewide Massachusetts rates for all high-risk young adults;³ however, these rates are not directly comparable and so should not be interpreted as indicative of Roca’s impact.
- **Survey findings:**
 - Survey respondents indicated that prior to engaging with Roca, they had been involved with or thought about a number of risky behaviors (such as doing something against the law (37%), using drugs or alcohol (58%), socializing with people who were doing something against the law (43%)) and overall, respondents who reported such risky thoughts and behaviors reported being much less likely to engage with these risky thoughts or behaviors since engaging with Roca.
 - From a list of options, respondents indicated having used Roca’s CBT skills to cope with a variety of scenarios, including violence, job loss, educational setbacks, relationship problems, and the COVID-19 pandemic.
 - Survey respondents also reported several accomplishments since starting at Roca, including staying out of jail, getting a job, finding positive role models, acting on their values, learning to slow down and use a CBT skill, taking programming classes, and learning how to identify getting stuck in a think-feel-do cycle. Differences in these findings across sites are likely indicative of the site variations we observed in the programming they offer as well as opportunities available in the community.

The impact of COVID-19

- COVID-19 has impacted Roca’s programming, the economy, and the justice system. Despite the disruption caused by the pandemic, its impact does not change our general findings for this evaluation because it represents such a small portion of the overall timeframe for this evaluation.

³ Statewide rates were determined via a report provided to Roca by the Massachusetts Juvenile Justice Pay-for-Success evaluation team on January 1, 2019 titled “(MA JJ PFS) Evaluation Tracker Recidivism (1.17.2019).xlsx”. The tracker was prepared by the MA Executive Office of Administration and Finance with data provided by the Executive Office of Public Safety and Security.

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1. Overview

Roca, Inc. is a non-profit organization serving high-risk young men and mothers, ages 17-24, with sites in Chelsea, Springfield, Holyoke, Boston, and Lynn Massachusetts, as well as in Baltimore, Maryland. In this report, we provide results from our three-year implementation evaluation of Roca's Intervention Model with high-risk young men at the four main Roca sites in the Commonwealth of Massachusetts: Chelsea, Springfield/Holyoke, Lynn, and Boston⁴. To understand how Roca's model is implemented, we conducted analyses to answer a variety of research questions using a combination of Roca's Efforts to Outcomes (ETO)⁵ performance management program data, Commonwealth Criminal Offender Record Information (CORI) data, qualitative observation data, and participant survey data.

The period of performance for this evaluation is April 1, 2018 to March 31, 2021. This period includes the coronavirus (COVID-19) pandemic and resultant shut-down of non-essential activity which began around March 15, 2020. To understand the impact of the COVID-19 pandemic on Roca's participants and operations, we conducted telephone interviews with Roca leadership, including the directors of each Roca site. During these calls, we learned that Roca was deemed an essential service by the Commonwealth and did not shut down its programming. However, the communities that Roca serves are among the hardest hit by the pandemic, and like most other aspects of social life, Roca had to rapidly adjust to operating safely within the pandemic context. Throughout this report, when applicable, we discuss the impact of the COVID-19 pandemic on Roca's model, Roca's participants, and our evaluation.

1.1 Research Questions

The set of research questions (RQs) and sub-RQs that this evaluation addresses include:

6. How is Roca's Intervention Model being implemented at each site?
 - a. What factors influence implementation and adaptation of the Roca model across and within sites?
7. What are the characteristics of the young men that Roca serves?
 - a. What are the risks and needs of Roca participants?
 - b. What is the criminal history of Roca participants prior to their participation in Roca?
8. What is the level of engagement among young men in Roca?
 - a. How many Roca participants obtain subsidized employment (TEP)?
 - b. How often do Roca Youth Workers contact the young men on their caseloads?
 - c. How often do Roca participants engage in formal programming through Roca?
 - d. How long do Roca participants remain actively engaged with Roca after eligibility?
 - e. How does engagement vary by site and by the characteristics, risks, and needs of Roca participants?

⁴ Participants in Roca's Central American and young mothers programs as well as at the Baltimore, MD site were not included in the scope of this evaluation.

⁵ Efforts to Outcomes (ETO) is a flexible and customizable performance management software, hosted by Social Solutions.

9. What are Roca participants' experiences with Roca?
 - a. How helpful do Roca participants find Roca?
 - b. How satisfied are Roca participants with Roca?
 - c. What are Roca participants' perceptions of Roca's impact on their attitudes and behavior?
 - d. What are the challenges and successes of Roca from the participants' perspectives?
 - e. How engaged and satisfied are Roca participants with Youth Workers and other Roca staff?
10. What do Roca participants' employment and recidivism outcomes look like?
 - a. What proportion of Roca participants obtains unsubsidized employment?
 - b. How often and how soon are Roca participants re-convicted of any offense after beginning participation in Roca?
 - a. How often and how soon are Roca participants re-convicted of a *violent* offense after beginning participation in Roca?
 - c. How do outcomes vary by site and by the risks and needs of Roca participants?
 - d. How is Roca programming linked to the attainment of and time to unsubsidized employment?
 - e. How is Roca programming linked to reconviction and the time to reconviction for any offense?
 - a. How is Roca programming linked to reconviction and time to reconviction for a *violent* offense?

1.2 Data Sources

Data for this evaluation come from a variety of sources. To answer RQ1, we conducted on-site observations at each of the four main Massachusetts sites⁶ and conducted informal interviews with Roca staff while on site. All observations were completed in 2019. To answer RQ2-5, we analyzed self-reported data from a Roca participant survey we conducted in the fall of 2020 and conducted statistical analyses using Roca's program data (ETO) and CORI data provided by the Department of Criminal Justice Information Services (DCJIS) in the Commonwealth of Massachusetts.

1.3 Human Subjects Review

Plans and protocols for all data collection and analysis were reviewed and approved by the Abt Institutional Review Board.

⁶ We did not conduct an on-site observation of the Holyoke site.

2. Methods and Analysis

The purpose of this evaluation is to describe the implementation of Roca programming and identify areas of discrepancy between sites and from the model as intended. In addition, we evaluated whether and how participant demographics, engagement, and select outcomes vary within and across Roca sites, and how the implementation of Roca’s model may provide context for understanding those findings.

2.1 Methods

2.1.1 On-Site Observations

An Abt team member⁷ conducted multi-day observations at each of the main Massachusetts Roca locations: Chelsea, Springfield, Lynn, and Boston. The observations consisted of shadowing Roca Youth Workers during their daily activities, including street outreach to young men and partner agencies, all scheduled on- and off-site programming for the days we observed⁸, drop-in programming, and ad hoc participant and staff activity and interactions on the streets and in the buildings. During the observation period, the observer used a structured observation protocol to document activity relevant for answering our research questions (see Appendix A). The protocols also included conversational questions that the observer used to informally interview staff on topics of interest during the period of observation (such as when driving between contacts or when waiting for programming to start).

2.1.2 ETO Program Data and CORI Data

We collected Roca’s ETO program data and Massachusetts CORI data for our sample of Roca participants. In service of Roca’s commitment to data-driven performance management, ETO data are designed with administrative, rather than analytical purposes in mind; thus, the data require substantial restructuring to create files that can be used for analytic purposes. In the following subsections, we describe the process for creating an analytic file using the ETO data.

2.1.2.1 Data Extraction and Matching

ETO Data

Data are extracted from ETO using a series of nine reports created by the Roca Director of Evaluation and Learning, Sotun Krouch: data collected at the time of referral; data collected at the time of intake; information on program enrollment; information on Youth Worker contacts with young men; information on participant program attendance; needs assessments; life event checklists; certifications obtained by Roca participants; and records of unsubsidized employment. While the unit of observation for some reports is the individual (e.g., referral is only filled out once for each person), some reports contain multiple observations per person. For example, the current program attendance form contains over 1,000 observations for some individuals, with one individual possessing 1,469 instances of a program attendance record. Simply combining these files would lead to a data set with numerous observations for each Roca participant, making any analyses of Roca participants difficult and misleading. As such, these data needed to be restructured for our analyses.

⁷ Although two team members were on-site for each observation, only one of them was focused on observations for this evaluation; the other team member was focused on observations related to the concurrent evaluation of Roca’s CBT curriculum.

⁸ Weekly programming at each site is flexible and dependent on youth programming needs and staff availability. When scheduling our observations, we coordinated with each site’s director to ensure that we were able to observe a variety of programming offered at the site.

CORI Data

CORI data are extracted through a four-step process. First, Abt analysts pull a sample of names and dates of birth based on the ETO data. This includes a main file and multiple files with different iterations of names for individuals with more than one last name. For example, John Jackson-Johnson would be submitted in three separate ways: John Jackson-Johnson, John Jackson, and John Johnson. Second, these files are submitted to the Roca Director of Evaluation and Learning who submits them to the Commonwealth of Massachusetts on Abt's behalf. Third, the Commonwealth matches these files to any name within their database, returns it Roca, and Roca returns it to Abt. Fourth, Abt analysts match the returned data to the ETO data. This matching is done programmatically. Because matching occurs on imprecise strings such as first and last name, the Commonwealth may and often does return close but not identical matches, and in cases where multiple individuals represent a close but not identical match, the Commonwealth returns all possible matches. The matching program we used first attempts to perfectly match cases (e.g., matching on identical string). For example, here, "John Jackson-Johnson" may be matched to "John Jackson-Johnson." This matching is tried using variations on individual's first, middle, and last names. For cases in which no perfect match exists, the program then attempts a similar series of matches using fuzzy matching (e.g., matching on similar but not identical strings). For example, here, if "John Jackson-Johnson" could not be matched in the perfect matching stage, he may match to "Jonathan Jackson Johnson" at this stage. Fuzzy matching is accomplished using generalized edit distance (the COMPGED function in SAS), which measures the dissimilarity between two strings, accounting for the number of deletions, insertions of replacements required to make two string identical. The closest matches (those with the lowest generalized edit distance) are the records that were linked.

2.1.2.2 Data Restructuring

ETO Data

The process of restructuring the ETO data involves making each piece of data into a wide file wherein each observation represents an individual rather than a program record. In this format, each of the program attendance records for each person, for example, are now listed as variables for that individual. Once all data are in a wide format, they are then combined into a single data set in which each observation represents a person, and all information on that person is contained within numerous variables.

CORI Data

CORI data also require restructuring. First, three variables must be parsed to obtain the criminal justice information associated with each observation, which represents an arraignment for a single offense. The variable "disp" contains all conviction and sentence information. The information is contained in an inconsistently recorded and ordered string, that requires hundreds of lines of code to parse. Next, the variables "offenseliteral" and "offensedesc" must be parsed in order to determine the offense for which an individual is being arraigned. Finally, as with the ETO data, these data are made wide so that each observation represents a person, and all arraignment information is contained within numerous variables.

2.1.2.3 Terms of Active Engagement

One challenge for summarizing activity at Roca is that the model is designed to allow for periods of disengagement and Roca rarely officially ends an individual's active involvement with Roca. As a result, programming end dates that are captured in ETO cannot be relied upon as clear indicators of disengagement with Roca for evaluation purposes. However, for this evaluation, we needed determine an "end date" for each individual in order to assess how long individuals remain involved with Roca and to construct rates of activity. To determine each individual's end date, we used participant and Youth Worker recorded activity to construct terms of activity or active engagement with Roca (hereafter, terms).

We started terms with the first instance of activity documented in intake dates, certification dates, enrollment dates, or Youth Worker activities, and ended it only when no activity had been recorded for an entire month⁹. Roca's operating procedures call for Youth Workers to make two actual contacts or four attempted contacts per week with young men on their caseloads. Based on this target, if Roca considers an individual to still be actively involved with Roca, it is highly unlikely they would have no contacts recorded for an entire month. Even if that individual has disengaged from Roca, their Youth Worker should still be regularly attempting to reach them, and these attempts would be recorded in ETO. If activity resumes after the determined end date (i.e., the young man becomes re-engaged), a new term will begin with a new start and end date. For this evaluation, the final set of CORI data and ETO data were extracted on December 20, 2020. Any individuals who were still actively involved with Roca on that date (and thus did not have a recorded program end date) had their end dates set to December 20, 2020. The selection of this date allowed for the construction of engagement rates by providing the underlying time spent at Roca and the quantification of the time spent with Roca across terms.

2.1.2.4 Final Sample

The data used for this report were edited to create a sample best aligned with the scope of the project. The sample only includes Roca participants from the Roca sites included in study (i.e., Chelsea, Boston, Holyoke, Lynn, and Springfield). In addition, because Roca underwent substantial program changes in 2012¹⁰, only Roca participants with an eligibility date between 2013 and 2020 were included in analyses. CORI data were obtained on December 20, 2020, and thus these data were used as the final date for all analyses. Any Roca activity that occurred after this date was not captured. All young men who were not deemed eligible for Roca were also not included in analyses. Finally, because the focus of this study is on the young men's program, we exclude female participants (i.e., young mothers). In agreement with Roca, we also exclude participants at Roca with a funding slot linked to the programming for the Central American Youth Initiative (i.e., CHS and DPH TPP).

2.1.3 Participant Survey

Our evaluation included a web-based survey of a sample of 642 active Roca participants at each Massachusetts site included in the study¹¹. We developed the survey (see Appendix A) and programmed it into ConfirmIT, an online survey software that allows access on a computer, tablet, or mobile phone¹². For young men in our sample with a valid email address, Abt sent an email with a unique link to the survey; for all others in the sample, Roca coordinators at each site sent text messages with a survey link. Upon opening the survey link, respondents were asked to read a consent statement and indicate that they had read it by clicking through to the beginning of the survey. Designated Roca coordinators were available to help respondents with any questions or challenges they had in accessing or completing the survey. The recruitment, survey, and consent material were made available in English and Spanish.

⁹ Using one month as the cut-off to define disengagement was determined in collaboration with Roca leadership.

¹⁰ In 2012, Roca made two major changes. First, Roca formalized the intake process to create a standard for determining eligibility and risk, including that all participants must be 17-24 years old and have to have the core risk factors. Second, Roca introduced stage-based programming, aligning the changes with the stages of behavior change.

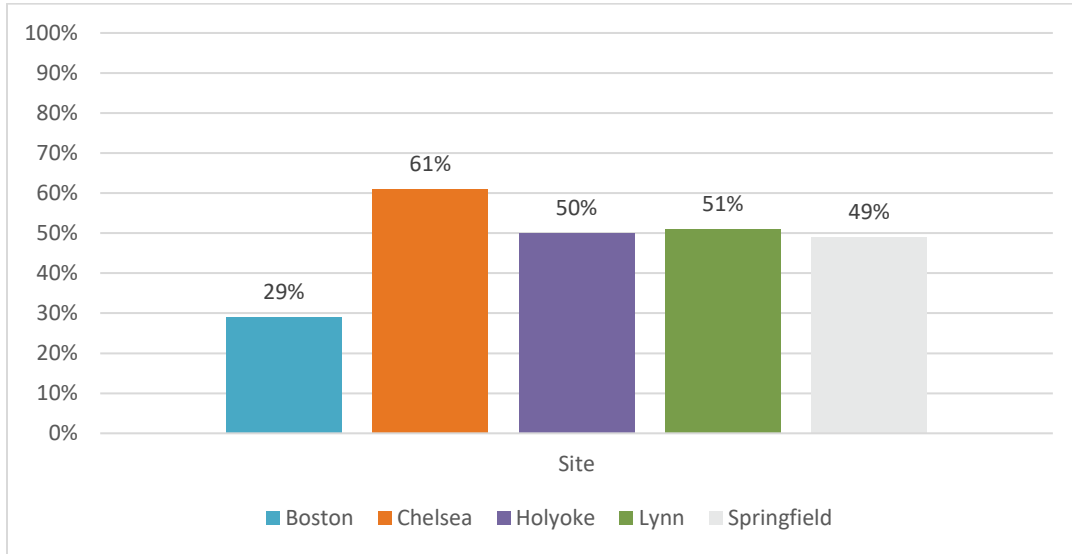
¹¹ We also administered the survey to participants in Roca-Baltimore; however, per the terms of this contract, we do not include the Baltimore sample in our survey analyses. We did not survey youth in the Central American or young mothers programs.

¹² In instances where youth did not have access to an electronic device to take the survey, Roca coordinated with the youth to provide access via Roca-owned tablets or computers. Abt was not involved in this process.

SECTION 2: METHODS AND ANALYSIS

The survey administration period began on September 21st, 2020 and ended on December 31st, 2020. A total of 302 Roca participants completed the survey. Seven Roca participants did not consent to taking the survey, and one person only answered two questions; these individuals were not included in the final sample of 302. The overall response rate was 47%. Exhibit 2.1-1 presents response rates for each site.

Exhibit 2.1-1. Participant Survey Response Rate by Site



2.2 Analysis

2.2.1 On-Site Observations

Daily notes taken during and after site observations as well as overall site observation summaries were entered into NVivo, a qualitative analysis software tool, for coding and analysis. Two Abt team members created a codebook a priori from the RQs and observation guides (see Appendix B). Additional codes were defined and added to the codebook as major themes were identified during the coding process. Queries were then run in NVivo to identify relationships between the codes and coded material was reviewed to identify instances of commonality and variation in implementation. The two Abt team members worked together throughout the codebook development and analysis processes to ensure consistency across the application of codes and interpretation of findings. We did not use a structured intercoder reliability process.

2.2.2 ETO Program Data and CORI Data

ETO program data were first analyzed using basic descriptive statistics to provide information on the individuals Roca serves, including the risks and needs of the individuals in our sample. These descriptive analyses also addressed the level of engagement of Roca participants in our sample. We examined these descriptives overall and by Roca site to uncover any differences observed in the characteristics of young men served at each site, recruitment strategies across sites, and Roca practices across sites. We used one-way analyses of variance (ANOVAs) and chi-squared tests of significance to assess whether differences across site were statistically significant. In addition, we explored the relationship between Roca participants' risks and needs and their level of engagement with Roca to provide insight into what types of young men may be most responsive to Roca programming and why. These analyses were conducted with a series of multivariate regression models, first regressing a single indicator of engagement with Roca on a single risk or need while controlling for the participant's site and year of eligibility. Site and

year of eligibility were included in the model to ensure that differences in outcomes were likely linked to risks and needs and not simply due to different Roca practices across time and space. Finally, we analyzed employment and recidivism outcomes for Roca participants. Specifically, we examine the occurrence of and time to unsubsidized employment, the length of unsubsidized employment, occurrence of and time to any criminal conviction, and occurrence of and time to any violent criminal conviction. For each outcome, we first assessed patterns of these outcomes overall and by site. We then explored the relationship between different measures of engagement with these outcomes. These analyses were done using multivariate regression models that controlled for Roca site, year of eligibility, and a variety of risk factors measured at the time of eligibility. These additional control variables are discussed in greater detail in section 3.5.1. We assessed all outcomes as both time-independent outcomes (i.e., the occurrence of employment, conviction, or violent conviction) and time-dependent outcomes (i.e., the time to employment, conviction, or violent conviction). The first set of analyses allowed us to analyze changes in the odds of an outcome (e.g., odds of employment), while the second allowed us to analyze changes in the likelihood of outcome at any particular point in time (e.g., the likelihood of employment at any particular point in time). The time-independent outcomes (i.e., the odds of an outcome) were estimated using a logistic regression model with an offset for the length of a term, and output was displayed as coefficients. The time-dependent outcomes (i.e., the likelihood of an outcome at a particular time) were estimated using a cox proportional hazard model, and output was displayed as hazard ratios.

The COVID-19 pandemic affected both Roca programming and the functioning of agencies and sectors responsible for various external measures (e.g., criminal justice processing, employment opportunities). Because the COVID-19 pandemic represents such a small portion of our analytic timespan¹³ it is unlikely the pandemic will change the overall findings. Nonetheless, we checked for this potential impact by determining whether any descriptive and bivariate findings changed when the period of time covered by the pandemic was excluded from analysis. For the multivariate findings, we made the same assessment and also re-ran all models with a covariate capturing whether an individual was active at Roca during the pandemic. The results of these analyses are discussed in section 3.5.2.

2.2.3 Participant Survey Data

Survey data analyses were modeled after the ETO program and CORI data analyses. Basic descriptive analyses were conducted first to describe the survey sample in terms of demographics, engagement with education, employment, and other community supports, and engagement and satisfaction with Roca. Descriptive statistics were examined overall and by Roca site. Because the timeframe for the survey administration encompasses the onset of the COVID-19 pandemic¹⁴, we also examined descriptive statistics by eligibility date prior to and after the onset of the COVID-19 pandemic. One-way ANOVAS and chi-squared tests were used to test significance across site and by eligibility before and after COVID-19. We also used multivariate regression models to explore the relationship between Roca participants' outcomes and indicators of engagement. As with the ETO analyses, regression models were run in steps, first controlling for site and eligibility date (pre-COVID-19 versus during COVID-19), then adding age and race/ethnicity as covariates. Because of the relatively small survey sample, we determined there would not be adequate power to control for as many covariates as were included in the ETO analyses.

¹³ We measure the impact of the COVID-19 pandemic on the functioning of Roca and various Massachusetts institutions as beginning on March 15, 2020. Thus, for our analyses, only the time between March 15, 2020 and December 20, 2020 is affected by the pandemic. The time between January 1, 2013 and March 14, 2020 was unaffected by the pandemic.

¹⁴ In collaboration with Roca leadership, we determined that March 15, 2020 would serve as the indicator for the onset of COVID-19 since this is the approximate date that shutdowns related to the pandemic began.

3. Findings

3.1 The Roca Model

Roca, Inc. is a non-profit organization that currently serves young adults (ages 17-24) in Massachusetts and Baltimore, Maryland who are at high risk of incarceration due to current or past gang involvement, justice system involvement, drug use or involvement in the drug trade, poverty, trauma and violence, structural racism, and who have high needs for services, including life skills, education, workforce training, and public assistance. Roca’s data-driven Intervention Model seeks to demonstrate that change is possible, even for the highest risk young people. To foster behavior change, and improve outcomes, Roca uses a four-year Intervention Model focused on creating a safe environment to engage high-risk young people in programming. The core elements of Roca’s Intervention Model that frame our evaluation are:

- **Relentless Outreach:** At the core of Roca’s model is that they never give up on young people. Trained Youth Workers go into young people’s communities, working to engage them—as well as their friends and families as needed—until they agree to participate in programming.
- **Transformational Relationships:** The Roca model emphasizes the importance of meaningful relationships built on trust and respect, particularly between Youth Workers and young people, which support lasting behavior change. Youth Workers build these relationships through intensive case management, persistent young adult contact, and 24/7 availability through both successful and challenging periods of time. Change at Roca is conceived as a process, comprising periods of success and periods of disengagement or even failure, and this element of the model is designed to promote consistent support for Roca participants regardless of where they are in the change process.
- **Stage-Based Programming:** Roca engages young men at any stage of readiness (i.e., precontemplation, contemplation, preparation, action, and maintenance)¹⁵, offering both structured and unstructured programming to provide all young people with the opportunity to learn and progress through the stages. Some of Roca’s programming builds toward education, such as HiSET/GED classes, or employment, like Roca’s Transitional Employment Program (TEP), whereas others, like the recently implemented curriculum based on cognitive behavioral theory (CBT), focus on incorporating life skills and emotion regulation into participants’ everyday lives.
- **Engaged Institutions:** Roca works to connect young people with organizations in the community that can help address their needs, keep them safe, and foster community trust. Roca staff engage with community institutions to advocate for young men, draw on external prosocial supports to help keep young men on a path to success, and encourage community institutions to work together to achieve outcomes for young men.
- **Performance-Based Management:** Roca has infused evidence-based approaches for improving outcomes throughout their model, using performance measurement data to monitor implementation fidelity and improve or modify program components.

¹⁵ The stage-based programming component of Roca’s model is based on evidence-based practices that align with the Transtheoretical Model (TTM) of Behavior Change (Prochaska and DiClemente, 1984) to meet and engage the young men “where they are” cognitively and behaviorally. (Prochaska, J. & DiClemente, C. 1984. *The transtheoretical approach: Crossing the traditional boundaries of therapy*. Homewood, IL: Dow Jones-Irwin.)

The four-year model has three phases, which occur in sequence after eligibility is determined. In **Phase I: Building Trust**, Roca lays the groundwork for developing relationships, changing behavior, and program participation. **Phase II: Behavior Change** is the “intensive intervention”, wherein Roca staff support young people as they work to develop important life skills and the interest in continuing to change for the better. Finally, in **Phase III: Sustaining Change**, the intensity of contact decreases, but Youth Workers continue to be in contact and provide support for young people when needed.

In recent years, Roca recognized a need to develop a non-traditional approach for dealing with trauma, emotional dysregulation and negative emotions that contribute to negative outcomes. Formal cognitive-behavioral intervention approaches like Thinking for a Change (T4C) have been demonstrated to improve outcomes for people with justice involvement¹⁶, but are also highly formalized and require successive learning sessions. Roca encountered implementation challenges in delivering T4C components in conjunction with the Roca approach of engaging with young men at varying stages of motivation and engagement. As a result, Roca participants who missed sessions were unable to re-engage with the sequential skill building and did not get the benefit of the intervention. To better serve their target population, Roca developed a tailored approach to cognitive-behavioral intervention in partnership with the Community Psychiatry Program for Research in Implementation and Dissemination of Evidence-Based Treatments (PRIDE) at Massachusetts General Hospital. This curriculum is based on cognitive behavioral theory (CBT), and is designed to work in conjunction with the Roca model, particularly with respect to outreach, relapse, and informal engagement with young men prior to full program enrollment. Roca’s CBT curriculum addresses Roca participants’ specific needs, and teaches them how thoughts, feelings, and behaviors are connected (“think-feel-do” cycles). The approach consists of mastering seven skills designed to be deliverable in various settings such as in a classroom, public library, or car, on the street corner, or wherever else the need arises. Each skill can be mastered independent of other skills and can be taught formally or informally. Roca’s CBT approach aims to incorporate this emotional regulation skills training into all activities and interactions by all staff.

Within the time period of our evaluation, but after we conducted our observations, Roca shifted their framework to more accurately reflect their incorporation of CBT into the model. The new framework comprises four tenets within which the core elements are organized:

- **Creating safety and stability** focuses on building trust and incorporates *relentless outreach* and *transformational relationships*.
- **Teaching life-saving skills** incorporates the new trauma-informed *CBT* curriculum.
- **Practice skills, relapse, and repeat** focuses on encouraging change, using failure as a teaching moment, and incorporates *stage-based programming*.
- **Engaged institutions and systems** focuses on building relationships with the communities and systems that impact Roca participants and incorporates *engaged institutions*.

Performance-based management continues to be an underlying element of Roca’s execution and monitoring of this framework.

In the next section, we address RQ1 by describing our observations of how the core elements of Roca’s model are being implemented on the ground, by Youth Workers and staff at the Chelsea, Springfield, Lynn, and Boston, Massachusetts sites.

¹⁶ <https://www.crimesolutions.gov/ProgramDetails.aspx?ID=242>

3.2 Implementation of Roca's Model (RQ1)

The core components of Roca's intervention model—relentless outreach, transformational relationships, stage-based programming, and engaged institutions¹⁷—were observed at each Roca site, but we also observed site-level variations, such as the physical space, communities and young men served, leadership, and staff availability. Prior to dissecting the elements of Roca's model that are implemented consistently and how they may vary, we provide short summaries of our overall observations about how each Roca site is differentially operating.

3.2.1 Roca Site Observation Summaries

3.2.1.1 *Chelsea*

Chelsea is the original Roca site and the first site that we observed as part of our evaluation. Throughout our five-day visit (January 28, 2019–February 1, 2019), we observed one CBT class, the culinary program, a workforce readiness class, a financial literacy class, a community dinner, the transitional employment program (TEP), and went on outreach four times. The site has a large kitchen, a basketball court, a large gym facility, and a workshop. Chelsea also serves high-risk young mothers as part of Roca's young mothers' program. We accompanied various Youth Workers as they attempted to engage with young men throughout the week. We also joined the Crisis Safety Manager for a community partner outreach program meeting with local providers to discuss cases of individuals needing help in the community. Chelsea has a large number of TEP participants that are required to complete two programs per week. Roca participants also have the opportunity to be selected by the cook to qualify for culinary TEP after they graduate from the 60-day TEP program.

3.2.1.2 *Springfield*

During our five-day visit at the Springfield site (April 29, 2019–May 3, 2019), we observed a substance use class, a High School Equivalency Test (HiSET) lesson, a studio lesson, a pre-vocational class, core circles, TEP, and the culinary program. The Springfield building is large and equipped with a gym, kitchen, and a number of classrooms and offices. The site also has two separate building structures located directly behind the main building that house the young mother's program and the pre-vocational workshop. At the time of our visit the pre-vocational workshop was not being used. Youth were routinely in and out of the building and were encouraged by the staff to join the programming currently being offered. Throughout the week, about five Roca participants participated in TEP. After TEP, most Roca participants stayed at the site to participate in programming and engage with staff. We observed street outreach with various Youth Workers and the Employment Specialist. We also met with Springfield's SNAP specialist who guides Roca participants through the application process to receive SNAP benefits. At the time of our visit, Springfield was piloting a POD structure approach to conducting outreach¹⁸, which we also observed. To enhance Roca's relentless outreach, this system creates a time during which

¹⁷ We did not directly observe the fifth component of Roca's model, performance management, during our site visits since that activity primarily occurs at the management/administrative level; however, we did observe instances of the use of program data to inform programming. For example, in some cases, ETO data were used to inform outreach decisions, award recipients honored at the award ceremony, and decisions to emphasize particular programming (e.g., WFR) during a given week when it was observed that the programming had not been documented for a while.

¹⁸ We conducted telephone interviews with each of the Roca site directors in the fall of 2020 to discuss the impact of the coronavirus pandemic on Roca's operations and participants. During the interview with the Springfield director (October 21, 2020), we learned that the formal POD system had been discontinued because it was not scalable to the other sites; however, aspects of the POD approach to targeted outreach were still being used at the Springfield site.

two Youth Workers and one coach conduct outreach together and target all individual caseloads to help ensure the young people are being appropriately serviced and targeted during outreach.

3.2.1.3 Lynn

Our site visit to Lynn was conducted over two days (June 17, 2019–June 18, 2019) since this is a smaller site (both physically and in terms of number of staff and young men served). We observed one formal CBT class and a workforce readiness class; we also observed outreach on three occasions including several hours observing TEP. The door at the site remains locked throughout the day for safety reasons, but Roca participants can use a buzzer to be let inside. The Lynn site has a few offices, classrooms, and a small kitchen. The kitchen, even though small, served as a meeting space for Roca participants to interact with each other and staff. Lynn had one Crew Supervisor at the time of our visit; we observed three to seven Roca participants participating in TEP during our visit. Due to the size of the Lynn site, the Youth Workers often interacted with the young men during outreach or at a location in the community, such as a Dunkin Donuts or a public library. In order to encourage engagement and build relationships with the Roca participants, Roca-Lynn aims to always have an ongoing project taking place on-site, such as painting the building.

3.2.1.4 Boston

During our five-day observation at the Boston site (August 29, 2019–September 2, 2019), we observed four formal CBT programs, a workforce readiness class, a business class, and went on outreach on nine occasions. The building has various offices and classrooms spread out across two floors. Because of the nature of gang activity in the community it serves, the site has a significant vetting process and uses a slot programming approach to monitor who will be in the building. This approach promotes Roca participants' progress by making sure they can safely engage in programming without worrying about conflicts with other Roca participants. Since this approach results in limited building access for Roca participants, most of the programming is conducted during outreach in the community. During our observation at Boston, there was one Roca participant participating in TEP; however, we could not observe this individual's TEP due to logistical challenges. Recently, the site designated two CBT "accelerators" to conduct more frequent CBT workshops at Boston. These accelerators were Youth Workers who conducted meetings with the Chief Programming Officer and then coordinated a workshop with the rest of their team when on-site. The Boston location also incorporates a "bridge to success" program designed to supplement a Roca participant's income for the first 80 hours of their employment. During our visit, the Roca Director and Assistant Director were actively trying to get involved in other community stakeholder meetings to try to enhance Roca's community connections in Boston.

3.2.2 The Impact of the COVID-19 Pandemic on Roca's Model

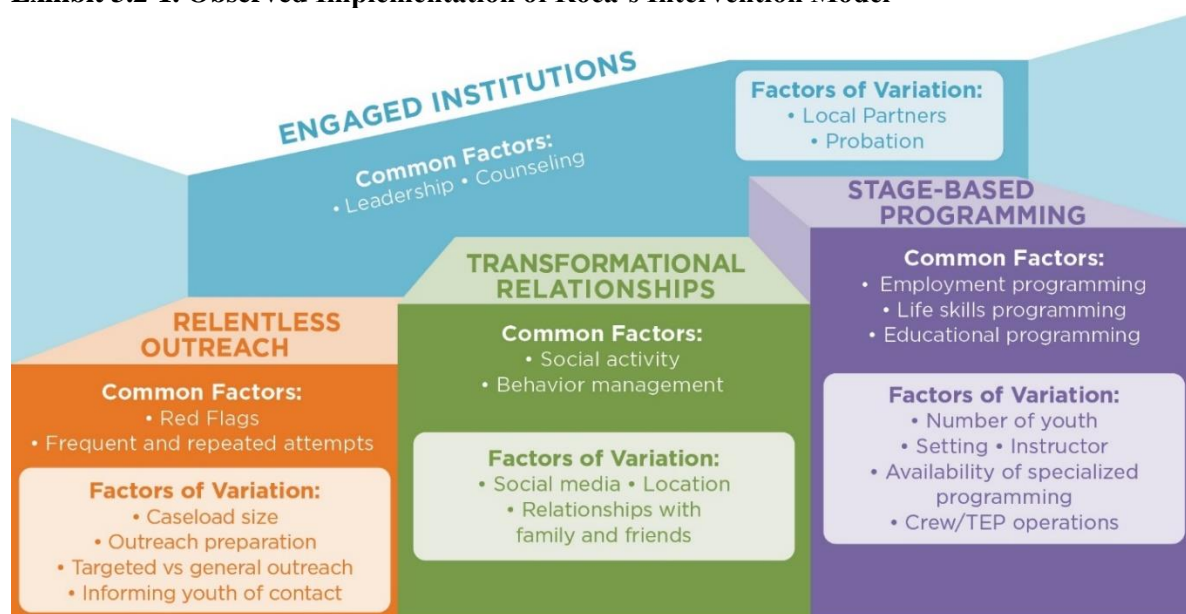
At the onset of the pandemic in March, 2020, Roca was deemed an essential service by Massachusetts, and was not required to suspend services. As such, they had to rapidly adapt their operations and programming to facilitate safe, yet effective services, to a population of increasingly vulnerable individuals. To understand the impact of the pandemic on Roca's model, we conducted telephone interviews with each of the Roca site directors, as well as the Executive Director of Roca's Impact Institute. The interviews lasted approximately 40 minutes, on average. According to the directors, each element of Roca's model has been impacted by various aspects of the pandemic. Staff and leadership have had to think creatively and adjust to new ways of working together and with the young people they serve. We discuss the impact of the pandemic on each component of Roca's model, as applicable, in the sections that follow.

3.2.3 Implementation Consistencies & Variation

We observed common factors within each of the core components, highlighting consistencies in the implementation of the Roca model across and within sites. We also observed several factors of variation that highlight the flexible components of Roca's intervention model to adapt to local contexts and best

serve the community in which the site is located. Exhibit 3.2-1 illustrates our observations of how the core components of Roca’s model are being implemented by Youth Workers and other Roca staff.

Exhibit 3.2-1. Observed Implementation of Roca’s Intervention Model



Three of the Roca model’s core components — relentless outreach, transformational relationships, and stage-based programming — are depicted as a set of steps that are implemented by Youth Workers and other staff in such a way as to bolster Roca participants’ success in each component. Relentless outreach is the first step in engaging young men in Roca’s intervention model and is the basis on which the other components of Roca’s model rest. Transformational relationships, or trusting and supportive relationships between Youth Workers and the young men on their caseloads, is central to Roca’s intervention model and is an essential step toward successfully engaging young men with Roca programming. Stage-based programming is the final step for young men engaged in Roca’s intervention model and is designed to provide them with the skills and knowledge they need to make changes in their lives. Operating somewhat behind the scenes, the engaged institutions component of Roca’s model facilitates critical support for Roca participants and serves to bolster Youth Workers’ efforts in the other three components. We provide details on the commonalities and variations we observed within each component and the relationships between them in sections 3.2.3.1–3.2.3.4.

3.2.3.1 Relentless Outreach

Common Factors: Across all sites, we observed Youth Workers conducting relentless outreach by making several repeated attempts throughout the week to connect with the young men on their caseload via text, phone calls, and in-person visits. Roca participants that were unable to be reached were added to the red flag list. The red flag list is a tool used at each site to identify Roca participants who Roca staff have not been able to contact and are considered high priority for outreach efforts. Youth Workers often indicated that if they make contact with a Roca participant on the red flag list when conducting outreach it is considered a successful day.

Variations: Within and across sites, we observed variation in Youth Workers’ approach to relentless outreach and the number of Roca participants they attempted to contact each day. The Youth Workers’ approach seemed to vary based on what works best for them, as well as the specific young men on their caseload. At each site, the size of a Youth Workers caseload varies depending on the other responsibilities of the Youth Worker. For example, in Boston a Youth Worker indicated they have a smaller caseload due to also serving as the Assistant Director. When preparing to conduct outreach, Youth Workers were often

observed creating a list of who they would like to target for outreach that day which often included Roca participants on the red flag list. In contrast, other Youth Workers preferred to conduct outreach to all young men on their caseload each day – an approach that was related to the number of young men on their caseload. One Youth Worker indicated that on Monday they aim to focus on all young men on their caseload and catch up on whether or not any of them need support based on events that may have occurred over the weekend. The Youth Worker then sets aside Friday for only red flags. Another Youth Worker targeted participants on the red flag list for a couple hours each day and then would move onto participants who they knew to be easier to find for the remainder of the day. Youth Workers also varied in whether they informed young men on their caseload that they would be contacting them. Youth Workers indicated that their decision to inform Roca participants of their planned outreach depended on the situation and their relationship with the participant. Youth Workers were often observed contacting Roca participants via text or phone call prior to conducting outreach to ensure the participant was in a specific location. In contrast, some Youth Workers were also observed informing Roca participants after they arrived at the participant’s residence by calling the participant and stating they were outside or by knocking on the door. Despite the Youth Workers varying approaches to contacting young men on their caseloads we consistently observed them remaining flexible and working together: helping one another with their caseloads and providing support, motivation, and advice to one another on a daily basis.

The Impact of COVID-19: In-person contact was significantly impacted by the COVID-19 pandemic and early stay-at-home and social distancing orders created several challenges for Roca’s relentless outreach. However, Roca’s Youth Workers have maintained their presence in the community by implementing strict protocols and safeguards regarding the use of masks and other PPE, physical distancing when making contact, not allowing Roca participants in Youth Worker vehicles, increased cleaning of Roca-owned vehicles, conducting contacts outside on the sidewalk or driveway instead of in the young person’s home, and the use of fist bumps instead of hugs or handshakes. Additionally, Roca leadership promoted increased use of virtual video technology, such as FaceTime, House Party, and Facebook Messenger to make contact with participants.

3.2.3.2 Transformational Relationships

Common Factors: Planned social activities were a common method used at each Roca site to help facilitate building relationships with Roca participants. For example, community dinner, which we observed in Chelsea and Springfield, was a positive environment that was conducive to friendly conversations and relationship building among the Roca participants and Roca staff. The vetting process for community dinner in Boston is extensive and thus was not observed. However, Roca staff in Boston were often planning one-on-one activities to engage with Roca participants such as going zip lining. Although we did not directly observe a social activity in Lynn, we learned that there is often an ongoing social project taking place at the site such as painting the building. During our observation in Springfield, we observed a workout class taking place in the common area of the site. The demeanor of everyone was positive and although it was not part of formal programming it was a fun activity for Roca participants and staff to engage in and strengthen relationships between the Roca participants and staff. The trust and rapport established through strong transformational relationships were also observed to positively impact behavior management during formal programming.

Variations: The variation we observed in the implementation of transformational relationships primarily occurred by Youth Worker, rather than by site. One variation we observed in how transformational relationship was implemented was the locations where Youth Workers engaged in relationship building. For example, Youth Workers were frequently observed taking their relationship with the young men into consideration when approaching outreach. Often, Youth Workers drive Roca participants to specific locations, such as the young man’s place of work or a public (e.g., restaurant) or community building (e.g., library). The time spent in the car was an opportunity for Youth Workers to have conversations with Roca participants that support relationship building. We also observed that other individuals connected to the young men, such as their families and friends, can help facilitate Youth Workers reaching the young

men and fostering a relationship with them. However, Youth Workers' comfort with and preference for reaching out to others connected to the young men varied. Some Youth Workers indicated that they like to have a relationship with participants' family and friends in order to help them locate the young men when needed. In comparison, other Youth Workers stated that they try to refrain from reaching out the participants' family because they do not want to blur the lines between their relationships with the young men and their families. We also observed variation in Youth Workers' preference to use social media as a way to interact with and keep track of the young men on their caseloads. One Youth Worker shared that they prefer to friend all Roca participants on social media as a way to highlight that the young men on their caseload are comfortable with being connected on social media because of the trusting relationship they have built. Additionally, Youth Workers who are comfortable with using social media to interact with Roca participants are able to share information as needed with others. For example, staff were observed discussing if any Roca participants posted photos to social media that may indicate a safety concern during a staff check-in meeting.

Regardless of how the relationship is formed, we consistently observed strong relationships and genuine care and compassion that the Youth Workers demonstrated for the young men throughout our observations across all sites. As illustrated in Exhibit 3.2-1, Youth Workers routinely indicated that they first focus on getting to know the young men and gaining their trust before introducing other aspects of the Roca model, such as CBT. Having a strong relationship with the young men facilitates their outreach efforts and also sets the foundation for effectively engaging them in stage-based programming.

3.2.3.3 Stage-Based Programming

At each site, we observed three core areas for teaching and practicing skills: employment programming (including transitional employment (TEP), educational programming, and life skills programming (including CBT). The nature of that programming varied across sites for a variety of reasons, including the number of young men engaged in the programming, the setting where the programming took place, the instructor, the availability of specialized programming (i.e., pre-vocational and culinary programming), and the process by which TEP operated. Furthermore, Roca's programming schedule remains flexible each week to align with the availability of staff and needs of Roca participants, so the details provided in this section reflect our observations of the programming offered during our observation period.

Employment Programming: Across all sites, we observed workforce readiness (WFR) programming. Roca's WFR curriculum offers Roca participants the opportunity to learn new skills related to applying for, interviewing for, and maintaining a job. The majority of the WFR classes we observed focused on interviewing skills. The WFR instructors were often observed infusing CBT cycles into the WFR lessons. For example, in Springfield, the instructor pointed out a cycle that may appear if a customer is upset while the young man is working. Culinary programming was observed only in Springfield and Chelsea due to the building being equipped with a full kitchen and a Chef instructor. If Roca participants in Lynn expressed interest in culinary programming, they had the option to travel to Chelsea. We also observed one pre-vocational class in Springfield. The class detailed how to change a range of light fixtures and safety around electrical outlets. We observed that the Roca participants were very engaged and interested in the topic being taught. We did not observe any pre-vocational classes at the Boston, Lynn, or Chelsea sites.

In Springfield, Chelsea, and Lynn, Roca participants were often observed engaging in programming after returning to the site from participating in TEP. In these instances, Roca participants were often observed to be disengaged and resistant to the content being shared, seemingly due to being eager to use their cell phones which were not allowed on TEP at those sites. Although TEP was present across all sites, the process by which Roca participants engaged in TEP varied. In Chelsea, Roca participants were actively participating in daily work crew, on re-hire participating in extra programming to re-qualify for TEP (i.e., "benched"), or terminated from the crew. Roca participants on bench status are young men that completed

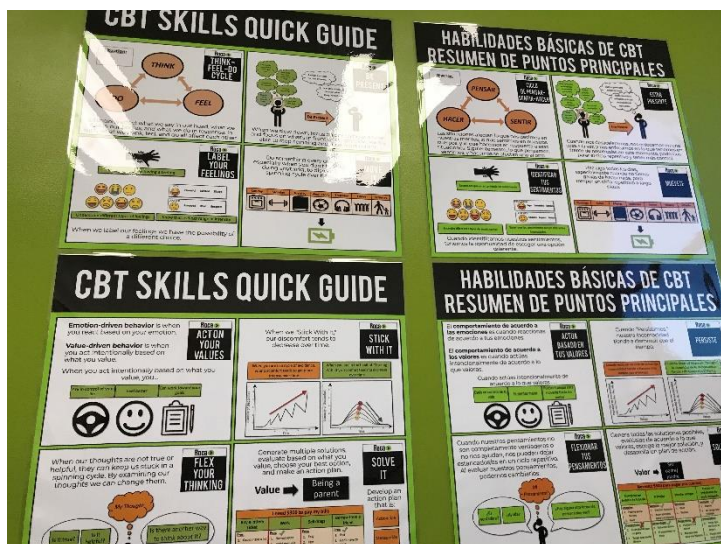
the programming requirement to qualify them to work, but due to limited space on crew are waiting for a spot to open up. Roca participants on bench serve as a standby in case an active Roca participant does not show up for work crew. In Springfield, Roca participants also had the option to be benched. In Lynn, the Assistant Director at the time of our visit also served as the TEP coordinator. In this role, the Assistant Director handled all terminations and rehires as needed for TEP. In Boston, Roca was working to regain trust within the community since experiencing the loss of a young man while on work crew due to gang-related violence in 2015. The resulting limited opportunities for work crew in Boston created long commute times to jobs outside of the city, and we were told that Roca participants at that site preferred to seek job opportunities outside of Roca.

Roca staff at all sites were observed reaching out to the community to some degree in order to identify employment opportunities for Roca participants or TEP or for work outside of Roca. We also observed the specific role of the Employment Specialist. In Springfield, we observed the Employment Specialist conducting outreach and meeting with potential employers who may be interested in hiring Roca participants. In addition to reaching out to potential employment partners, the Employment Specialist helped Roca participants with their resumes and application process. In Boston, we observed the Employment Specialist visiting Roca participants at their place of employment, connecting with various hiring managers, and handing out business cards. At the time of our observation, there was no Employment Specialist on staff at the Lynn site. Lynn staff members expressed the need for a staff member dedicated to employment services to gain partnerships willing to employ Roca participants. Chelsea's Employment Specialist on staff was on leave during the week of our observation.

Educational Programming: Across all sites we observed strong encouragement for Roca participants to complete the HiSET/GED exam. At each site, HiSET/GED programming was offered and tailored to the needs of the young men. In Chelsea, lessons were one-on-one and the Educator used a large binder that contained each Roca participant's homework materials and progress reports. In Springfield, the Educator was observed teaching a lesson to a group of two Roca participants. At the time of our observation at the Boston site, there was no Educator on staff. In this case, other staff (e.g., Youth Workers) stepped in to provide Roca participants with the opportunity to engage in educational programming.

Life Skills Programming: Life skills programming was observed across all sites. We observed a substance use class, permit classes, and CBT. In Springfield, the substance use class aimed to teach Roca participants about how different substances can affect the body and mind. The Youth Worker teaching the lesson tailored the topic to the specific Roca participants participating in the class, which led to an active and engaging conversation. In Lynn, staff shared that permit classes are popular among Roca participants. However, we observed that it was a challenge for Youth Workers to receive the paperwork needed for Roca participants to get their permit, such as social security cards and proof of address. CBT is designed to be infused throughout the core elements of the Roca model as it serves as a catalyst for a strong relationship between Youth Workers and Roca participants. CBT visuals were often observed at the Roca sites on the walls (see Exhibit 3.2-2) and with the Youth Workers (e.g., skill cards connected to their lanyards).

Exhibit 3.2-2. Photo of CBT Wall Posters Observed at Roca-Chelsea



Youth Workers routinely emphasized that it is important to know a young man’s basic needs (shelter, food, clothing) when first engaging with them and often stated that they will not engage young men in formal CBT programming until the relationship develops but will often infuse informal CBT during the relationship-building process. In Boston, CBT lessons were observed exclusively one-on-one and often in the car or at the Roca participant’s residence due to building constraints. In comparison, in Chelsea we observed one CBT lesson with nine Roca participants in a classroom setting at the Roca building. Often, the Roca participants receiving one-on-one lessons appeared more engaged in the CBT lesson because the topic was individualized to fit a need of that young man.

Roca routinely provides staff with trainings to keep them up to date on the skills and new ways to teach the Roca participants. We observed that, overall, the Youth Workers seem to have a strong handle on the CBT skills. For example, when one Youth Worker suggested a CBT lesson to a Roca participant, that young man responded, “not today”. The Youth Worker was receptive to this response and suggested a WFR lesson instead but was still able to incorporate CBT into the WFR lesson. In addition, some of the Youth Workers said that they use the CBT curriculum in their own lives and often used the skills in their interactions with the Roca participants. The CBT skill cards that are designed for Youth Workers to take on the road were unanimously praised for their ease and convenience for informal CBT lessons during outreach and when conducting programming in the field. Youth Workers discussed often sharing lessons learned and tips for overcoming challenges related to the CBT curriculum with each other.

The Impact of COVID-19: Stage-based programming was severely impacted by the pandemic. At the onset of the pandemic, Roca was forced to suspend any and all programming that could not be done virtually. TEP was closed down and Roca needed to furlough crew supervisors. Many of the social activities designed to foster transformational relationships, such as community dinners and social outings, were also cancelled. The Roca buildings, which provide young people with a safe space to learn, develop, and socialize, were also forced to close or remain open at a very limited capacity. For programming that could be done virtually, Roca acted swiftly to transition their classes and programming to a virtual format. Roca received grant funding to provide staff with laptops or tablets and participants with tablets, and to work on disseminating broadband hotspots to participants in order to improve access to the internet. Roca’s newly established Educational Institute¹⁹ also developed a digital literacy program to enable

¹⁹ The Education Institute was developed after we had conducted our site observations, so we were not able to observe this feature of Roca.

virtual learning during the pandemic, but also as a skill-building program to expand future job opportunities.

3.2.3.4 Engaged Institutions

Common Factors: Engaged institutions is a unique component of the Roca model and was observed to be primarily handled by leadership, particularly the site director.²⁰ Through Roca's presence in the community and associations with local businesses and entities, community partnerships can be established, maintained and strengthened. These partnerships help to facilitate successful referrals of young men into the Roca program as well as other services that Roca participants may need such as shelters, treatment, and jobs. Additionally, Roca works to partner with mental health clinicians across sites to provide Roca participants with counseling opportunities. In Springfield, this partnership allows for one counselor to meet with Roca participants most afternoons from 20 to 90 minutes depending on the participant's needs. In Lynn, a counselor is on site twice a week for a total of ten hours. In Boston, the site was establishing a connection with a local hospital in order to provide counseling services to a few Roca participants a month.

Variations: One institution that we observed Youth Workers regularly engaging with was probation. However, the level of Youth Worker engagement with probation officers varied by the needs of the Roca participants. In Lynn, we joined a Youth Worker as they took a Roca participant to their court appointment. The Youth Worker indicated the young man's probation officer was particularly hard on the young man and was joining him for his appointment to provide support. In Boston, one Youth Worker went directly to a Roca participant's probation officer for approval to take the young man to his driver's permit test. The relationship observed between this Youth Worker and probation officer was very positive. We also observed Roca staff engaging with various local partners across sites, and the variation in these partnerships seemed to be influenced by both existing relationships between Roca and the community, as well as the particular communities that Roca serves. In Boston, Roca staff met with a local hospital team to start building a relationship between the trauma team and Roca. In Chelsea, we observed a meeting between Roca and local partnerships including public school representatives, domestic violence advocates and centers, department of children and family, at the Chelsea police department. The purpose of this meeting was to discuss events in the community and work together to offer a variety of services to targeted individuals. These community ties in particular seem to facilitate a group of individuals all working towards a common goal of helping these high-risk young men transform their lives.

The Impact of COVID-19: The primary impact of the pandemic on engaged institutions was that those institutions and organizations that Roca engages with were also impacted and forced to adapt, scale-back capacity, or close altogether. For example, schools transitioned to remote learning in the spring, and other organizations such as places of worship and community centers closed, which limited Roca's ability to engage these organizations in support of their participants. Other public offices for services such as obtaining drivers licenses, copies of birth certificates, or unemployment benefits had reduced staff capacity to deal with increased demands. Similarly, law enforcement, jails, courts, and probation agencies were facing reduced capacity and other priorities related to the pandemic and the larger context of social unrest and calls for police and criminal justice reform.

3.3 Characteristics of the Young Men that Roca Serves (RQ2)

To describe the young men that Roca serves, including their risks and needs, we examined the characteristics of Roca participants on the date they were deemed eligible for Roca.

²⁰ We did not observe the day-to-day activities of the Roca Directors, and so our observations of the Engaged Institutions component of Roca's model was limited.

3.3.1 Basic demographics

Table 3.3-1²¹ displays basic demographics (the age, race, and ethnicity) of Roca participants overall and across sites. Age at eligibility remains fairly consistent across the four sites, with an average age of 21. The race and ethnicity of Roca participants varies notably by site ($P < 0.001$). For example, participants at the Boston site are most likely to be black or African American, while the participants at all other sites are most likely to be Hispanic/Latino, and only at the Chelsea and Lynn sites are more than 10% of the participants White.

Table 3.3-1. Roca Participant Demographic Characteristics Overall and by Roca Site

Variable	Overall Mean (SD)/ Percent	Boston Mean (SD)/ Percent	Chelsea Mean (SD)/ Percent	Holyoke Mean (SD)/ Percent	Lynn Mean (SD)/ Percent	Springfield Mean (SD)/ Percent
<i>Age at Eligibility</i>	21.24 (2.33)	21.54 (2.47)	20.77 (2.47)	20.92 (2.13)	21.50 (2.14)	21.35 (2.13)
Race/Ethnicity						
<i>Black/African American</i>	36.09%	67.87%	22.65%	5.22%	23.53%	29.83%
<i>White</i>	7.34%	1.92%	14.64%	6.09%	17.65%	3.43%
<i>Bi/Multi-Racial</i>	4.16%	5.04%	6.08%	0.87%	7.19%	1.72%
<i>Other Race</i>	2.31%	1.44%	3.31%	0.00%	3.27%	2.58%
<i>Hispanic/Latino</i>	50.10%	23.74%	53.31%	87.83%	48.37%	62.45%

3.3.2 Justice Involvement and Criminal History (Risks)

In addition to basic demographics, we also examined eight measures of Roca participants' current or past justice involvement, including:

1. number of prior arrests
2. the most serious offense of all prior charges
3. the percent of individuals with prior convictions
4. the percent of individuals with prior incarcerations
5. the percent of individuals with prior community supervision sentences
6. the percent of individuals with a prior juvenile justice sentence
7. the percent of individuals currently involved with gangs
8. the percent of individuals with current drug use or sales involvement

Findings are presented in Table 3.3-2.

Table 3.3-2. Roca Participant Criminal Justice History Overall and by Roca Site

Variable	Overall	Boston	Chelsea	Holyoke	Lynn	Springfield
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²¹ The total population for the analyses discussed below is 1,740, yet sample size for each variable in the tables within this section varies by response rates to these items in the intake form. All analyses are conducted on only non-missing cases, and thus percentages represent the ratio among all non-missing cases (e.g., percent Hispanic/Latino among all with a non-missing answer to race and ethnicity items on the intake form). Due to the presentation of multiple sites and variables within each table, overall and site-specific sample sizes are not listed in the tables within this section.

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	Mean (SD)/ Percent	Mean (SD)/ Percent	Mean (SD)/ Percent	Mean (SD)/ Percent	Mean (SD)/ Percent	Mean (SD)/ Percent
<i>Number of Arrests</i>	5.67 (5.95)	6.48 (6.30)	5.83 (6.01)	3.67 (3.31)	6.37 (5.96)	5.05 (5.90)
Most Serious Charge						
<i>Felony</i>	80.42%	92.37%	81.61%	60.00%	77.48%	75.77%
<i>Misdemeanor</i>	17.27%	6.36%	15.80%	35.20%	20.53%	21.81%
<i>Less-Serious Offense</i>	2.31%	1.27%	2.59%	4.80%	1.99%	2.42%
Other Indications of Justice Involvement						
<i>Prior Convictions</i>	64.21%	79.26%	55.49%	48.03%	73.03%	59.44%
<i>Prior Adult Incarceration</i>	53.21%	65.76%	39.07%	40.94%	60.53%	54.43%
<i>Prior Community Supervision Sentence</i>	56.70%	68.33%	47.40%	44.88%	64.47%	54.64%
<i>Prior Juvenile Justice Sentence</i>	46.96%	51.99%	46.13%	34.92%	58.94%	42.58%
<i>Current Gang Involvement</i>	50.34%	69.13%	44.41%	30.66%	49.94%	44.34%
<i>Current Drug Use or Sales</i>	63.10%	71.30%	61.61%	58.39%	77.01%	53.74%

Overall, our findings align with Roca’s mission to focus their programming on young men with substantial justice involvement. On average, Roca participants have about six prior arrests and 80.42% have a prior charge for a felony. In addition, more than half of the Roca participants have a prior conviction (64.21%), incarceration (53.21%), or community supervision sentence (56.70%). Just over half of the Roca participants are currently gang involved (50.34%), and almost two-thirds are involved with drug use or sales (63.10%).

Differences in justice involvement and criminal history across sites are distinct, with Roca participants from Boston and Lynn having more extensive and serious criminal histories than their counterparts from Chelsea, Springfield, and Holyoke. Differences across sites are statistically significant for all justice involvement measures. These differences especially stand out for incarcerations, with 75.76% of Boston participants and 60.53% of Lynn participants having a prior incarceration, compared to 54.43% of participants in Springfield, 39.07% in Chelsea, and 40.94% in Holyoke.

In addition to examining the self-report criminal history for Roca participants captured in ETO, we also examine their criminal history according to their CORI data. The findings presented in Table 3.3-2a represent all criminal activity prior to an individual’s date of eligibility, overall and by site.

Table 3.3-2a. Roca Participant CORI Criminal Justice History Overall and by Roca Site

Variable	Overall Mean (SD)/ Percent	Boston Mean (SD)/ Percent	Chelsea Mean (SD)/ Percent	Holyoke Mean (SD)/ Percent	Lynn Mean (SD)/ Percent	Springfield Mean (SD)/ Percent
<i>Number of Prior Convictions</i>	4.61 (6.97)	5.24 (6.58)	4.56 (8.14)	2.96 (5.07)	3.7 (5.32)	4.84 (7.05)
<i>Number of Prior Felony Convictions</i>	2.13 (3.67)	2.62 (3.55)	2.13 (4.26)	1.25 (2.48)	1.54 (2.38)	2.13 (3.77)
<i>Number of Prior Incarcerations</i>	2.75 (4.92)	3.19 (4.78)	2.69 (5.79)	1.64 (3.13)	1.87 (3.04)	3.00 (5.04)

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<i>Number of Prior Felony Incarcerations</i>	1.39 (2.82)	1.73 (2.67)	1.34 (3.28)	0.72 (1.67)	0.86 (1.6)	1.49 (3.01)
<i>Any Prior Arraignments for a Violent Offense</i>	66.32%	71.96%	62.72%	57.66%	67.82%	66.22%
<i>Any Prior Arraignments for a Drug Offense</i>	36.78%	41.96%	35.04%	35.77%	33.91%	34.93%
<i>Any Prior Arraignments for a Weapons Offense</i>	57.82%	69.78%	51.12%	47.45%	59.20%	55.28%

Overall, the findings using these official data are congruent with those reported by young men at intake to Roca: most Roca participants have a substantial history of justice involvement. On average, Roca participants have about five prior convictions and about four prior incarcerations. More than half of all youth have a prior arraignment for a violent offense, and more than half have a prior arraignment for a weapons offense.

Patterns emerge by site, with Roca participants at the Lynn and Holyoke sites exhibiting notably lower rates of conviction and incarceration than Roca participants at Boston, Chelsea, and Springfield ($p < 0.001$ for all). In terms of offense type, prior violent and weapons offenses are more common in Boston and Lynn ($p < 0.001$).

3.3.3 Social Needs

We also examined a number of aspects of a Roca participant's past that may indicate current need, including employment and educational history, housing stability, whether a participant has a child to care for, and whether that participant requires (or has required) various forms of public assistance, use of prescription medication, and a history of counseling or hospitalizations. In Table 3.3-3 we display the results for employment and education, overall and by site.

Table 3.3-3. Roca Participant Employment and Education Status Overall and by Roca Site

Variable	Overall Percent	Boston Percent	Chelsea Percent	Holyoke Percent	Lynn Percent	Springfield Percent
<i>Current or Past Employment</i>						
<i>Currently Employed</i>	13.62%	14.25%	14.40%	6.45%	15.13%	13.88%
<i>Recent Prior Employment</i>	19.71%	16.50%	19.73%	16.94%	34.87%	18.22%
<i>No Recent Employment</i>	66.67%	69.25%	65.87%	76.61%	50.00%	67.90%
<i>Education</i>						
<i>HS Diploma or GED</i>	41.14%	45.50%	45.99%	25.40%	37.91%	38.70%

In general, two-thirds of Roca participants have not had a recent (past 6 months) job at the time of eligibility (66.67%), and only 14.31% have current employment. In addition, less than half of Roca participants have a high school degree or GED at the time of eligibility (41.14%). The rate of having a high school degree or GED is lowest in Holyoke ($p < 0.001$) and participants in Lynn are more likely than participants in other sites to have had past employment, and participants in Holyoke more likely to have no recent employment history ($p < 0.001$).

Next, we examined the home life of Roca participants, the results of which are displayed in Table 3.3-4.

Table 3.3-4. Roca Participant Home Life Overall and by Roca Site

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Variable	Overall Percent	Boston Percent	Chelsea Percent	Holyoke Percent	Lynn Percent	Springfield Percent
<i>Current Housing Location</i>						
<i>Family's Home</i>	74.92%	80.20%	76.76%	74.19%	71.24%	70.32%
<i>Friend's Home</i>	10.66%	10.03%	7.57%	10.48%	13.07%	12.90%
<i>Renting an Apartment or Room</i>	6.95%	3.01%	5.95%	10.48%	6.54%	10.32%
<i>Communal Housing</i>	4.37%	4.01%	5.95%	1.61%	4.58%	4.09%
<i>Unsheltered</i>	3.11%	2.76%	3.78%	3.23%	4.58%	2.37%
<i>Fathers or Expectant Fathers</i>	38.66%	34.47%	26.05%	40.80%	42.28%	51.09%

While most Roca participants live with their family (74.92%), some live with a friend (10.66%) or rent an apartment (6.95%), and about one-twelfth are less stably housed. These individuals either live in some sort of communal setting such as a foster or group home, teen living program, transitional housing program, or shelter (4.37%) or are living unsheltered and on the street (3.11%). These findings vary noticeably by site, with Roca participants in Chelsea and Lynn more likely to either live in communal housing or unsheltered than are Roca participants in Boston, Springfield, and Holyoke ($p < 0.01$).

Nearly two-fifths of Roca participants are either current or expectant fathers at the time of eligibility. This finding varies more substantially by site. Roca participants in Chelsea (26.05%) and Boston (34.47%) are less likely to be current or expectant fathers, while Roca participants in Holyoke (40.80%), Lynn (42.28%), and Springfield (51.09%) are far more likely to be current or expectant fathers ($p < 0.001$).

Finally, we explored the use of public assistance and prescription medications among Roca participants in order to provide insight into other needs Roca participants may have. The results of these analyses are displayed in Table 3.3-5.

Table 3.3-5. Roca Participant Public Assistance and Medication Use Overall and by Roca Site

Variable	Overall Percent	Boston Percent	Chelsea Percent	Holyoke Percent	Lynn Percent	Springfield Percent
<i>Current or past Use of Public Assistance</i>						
<i>Any Public Assistance</i>	79.74%	80.00%	71.05%	85.71%	85.61%	82.60%
<i>Housing Assistance (HUD)</i>	10.17%	15.43%	12.72%	2.19%	18.97%	2.50%
<i>Medical Assistance</i>	61.49%	63.04%	46.88%	82.48%	65.52%	65.83%
<i>Food Assistance</i>	34.20%	28.70%	27.46%	22.63%	39.08%	46.26%
<i>Disability Benefits</i>	11.14%	6.30%	11.16%	13.14%	15.52%	13.44%
<i>Income-Based Benefits</i>	8.22%	9.57%	8.71%	2.19%	9.20%	7.87%
<i>Other Benefits</i>	1.67%	0.43%	3.13%	1.46%	1.15%	1.73%
<i>History of Counseling</i>	41.17%	29.00%	48.24%	33.60%	60.93%	41.65%
<i>History of Hospitalization</i>	28.62%	26.82%	34.32%	22.22%	45.03%	21.96%
<i>Prescription Medication Needs</i>						
<i>Current Use</i>	10.58%	7.50%	11.20%	14.29%	10.60%	11.74%
<i>Historical Use</i>	21.02%	12.75%	24.32%	20.63%	27.81%	23.48%
<i>Never Used</i>	68.40%	79.75%	64.48%	65.08%	61.59%	64.78%

Overall, 79.74% of Roca participants or their family currently or in the past have required public assistance, with rates highest among Roca participants from Lynn ($p<0.01$). About one-tenth of Roca participants have required housing assistance (10.17%), with rates again highest among Roca participants from Lynn ($p<0.01$). Almost two-thirds of all Roca participants have enrolled in programs that provide financial assistance for medical needs (e.g., Medicaid, MassHealth) (61.49%), with rates again, higher among Roca participants from Lynn (65.52%) and also Holyoke (82.48%) ($p<0.001$). Need for food assistance is also relatively common, with over one-third of Roca participants or their families using WIC or SNAP (34.20%). Again, this finding varies by site, with Roca participants from Lynn (39.08%) and Springfield (46.26%) having the highest rate and Roca participants from Holyoke (22.63%) having the lowest rate ($p<0.001$). About a tenth of all Roca participants or their families used assistance for disabilities (11.14%), with rates once again highest among Roca participants from Lynn (15.52%) ($p<0.01$). Income-based benefits are slightly rarer (8.22%), and there is little variation by site, except for the very low rate in Holyoke (2.19%). Finally, a handful of Roca participants report some other form of public assistance (1.67%), with most of these Roca participants coming from Chelsea (3.13%) ($p<0.05$).

Two-fifths of all Roca participants had a pre-Roca history of mental health counseling (41%), with the highest rate in Lynn (61%) and the lowest rate in Boston (29%) ($p<0.001$). Slightly less than a third have history of hospitalization (29%), with the highest rate in Lynn (45%) and the lowest rate in Springfield (22%) ($p<0.001$). About one-third of all Roca participants either currently (11%) or in the past (21%) have needed prescription medication, with the highest rates of never using prescription medication among Roca participants in Boston (80%) and lowest among Roca participants in Lynn (62%) ($p<0.001$).

3.3.4 Characteristics of Roca Participants – Survey Sample

Because the Roca participants who were surveyed for this evaluation represent a sub-sample of the larger sample included in our analyses of ETO data, we present basic characteristics of the Roca participants who completed the survey. Of the 302 respondents, 16% reported being based at the Boston site, 26% at Chelsea, 14% at Holyoke, 16% at Lynn, and 27% at Springfield. The majority of respondents (81%) had an eligibility date before March 15, 2020, indicating most of the respondents became eligible to engage with Roca prior to COVID-19 becoming a significant disruption to everyday life. We compared the characteristics of respondents who were eligible before March 15, 2020 to those who were eligible after that date but did not find any significant differences.

On average, the survey respondents were 21 years old at date of eligibility. Age varies by site ($p<0.01$), with age at eligibility tending to be higher at Lynn (21.76) than at other sites. Race and ethnicity also varied significantly across sites ($p<.001$). For instance, the proportion of Black/African American respondents was much higher at Boston than at other sites, and the percentage of Hispanic/Latino respondents was larger at Holyoke than elsewhere. These racial/ethnic differences correspond roughly to the demographic differences observed in the ETO data across sites.

Table 3.3-6. Roca Participant Survey Respondent Demographic Characteristics Overall and by Site

Variable	Overall Mean (SD)/ Percent	Boston Mean (SD)/ Percent	Chelsea Mean (SD)/ Percent	Holyoke Mean (SD)/ Percent	Lynn Mean (SD)/ Percent	Springfield Mean (SD)/ Percent
<i>Age at Eligibility</i>	20.67 (2.41)	20.17 (2.70)	20.17 (2.46)	20.89 (2.12)	21.76 (2.31)	20.71 (2.18)
<i>Race/Ethnicity</i>						

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<i>Black/African American</i>	32.60%	80.95%	19.18%	2.86%	27.50%	34.94%
<i>White</i>	9.16%	0.00%	15.07%	8.57%	17.50%	4.82%
<i>Bi/Multi-Racial</i>	5.13%	4.76%	5.48%	2.86%	10.00%	3.61%
<i>Other Race</i>	1.47%	0.00%	5.48%	0.00%	0.00%	0.00%
<i>Hispanic/Latino</i>	51.65%	14.29%	54.79%	85.71%	45.00%	56.63%

The survey also asked respondents if they had a job or took classes for at least three months prior to engaging with Roca. Overall, 42% of respondents had had a job prior to coming to Roca, whereas 54% had not; 4% reported having a job but losing it as a result of the COVID-19 pandemic. Reported employment prior to Roca engagement varied significantly across sites ($p < .01$), with more than half of respondents from Lynn and Chelsea reported being employed pre-Roca compared with one fifth in Holyoke. Nearly 10 percent of Boston respondents reported losing their jobs due to the pandemic, whereas just 1% of Chelsea respondents did. In addition, 10% of survey respondents reported having been taking classes or vocational training prior to starting with Roca, 88% had not been taking classes or training, and 2% had been but stopped due to the pandemic.

In terms of other community engagement prior to engaging with Roca, 45% of respondents indicated engaging with at least one agency or support from outside Roca in the year prior to survey administration. The largest proportion of respondents indicated having contact with a probation officer (20%), a caseworker or social worker (15%), or a therapist/counselor (15%); smaller percentages reported contact with a parole officer (5%), a behavioral health clinic (5%), and a substance abuse clinic (4%). There were significant differences across sites for contact with a caseworker ($p < .01$) and substance abuse treatment clinic ($p < .001$): respondents from Boston were most likely to engage with a caseworker, and respondents from Chelsea had the highest proportion of respondents engaging with a substance abuse treatment clinic.

Table 3.3-7. Roca Participant Survey Respondent Employment, Education, and Other Community Engagement Prior to Roca Eligibility

Variable	Overall Percent	Boston Percent	Chelsea Percent	Holyoke Percent	Lynn Percent	Springfield Percent
<i>Employed >3 months prior to Roca</i>	42.00%	32.65%	53.75%	20.00%	55.10%	39.02%
<i>Lost job due to COVID-19</i>	3.67%	8.16%	1.25%	2.50%	2.04%	4.88%
<i>Took classes/training >3 months prior to Roca</i>	9.67%	16.33%	6.25%	12.50%	8.16%	8.54%
<i>Stopped due to COVID-19</i>	2.33%	2.04%	1.25%	2.50%	2.04%	3.66%
<i>Engagement with other community institutions in past year</i>						
<i>Probation officer</i>	20.33%	22.45%	23.75%	12.50%	22.45%	18.29%
<i>Parole officer</i>	4.67%	2.04%	2.50%	2.50%	10.20%	6.10%
<i>Caseworker/Social worker</i>	15.00%	32.65%	13.75%	7.50%	10.20%	12.20%
<i>Substance abuse treatment clinic</i>	3.67%	0.00%	11.25%	0.00%	2.04%	1.22%
<i>Behavioral health clinic</i>	4.67%	6.12%	2.50%	2.50%	8.16%	4.88%
<i>Therapist/counselor</i>	14.67%	18.37%	18.75%	20.00%	6.12%	10.98%

Overall, these findings generally correspond with the ETO data suggesting that Roca participants were largely disconnected from education and employment prior to engaging with Roca. However, there are some nuances to our findings for the survey sample. For example, a small percentage of Roca participants who had been taking classes or training for a sustained period before Roca eligibility is not at odds with the roughly half of Roca participants who had a high school diploma or GED, as the survey measure is more of a point in time estimate – presumably, young men who already had their diploma or GED were no longer pursuing education when they became eligible for Roca. In contrast, the results suggest that a larger percentage of young men had some sort of employment than is officially captured in the ETO data. There are a few possibilities for this discrepancy. First, it is possible that the young men more likely to respond to a survey were also more likely to be employed before engaging with Roca, suggesting a response bias in this finding. Second, the wording of the survey question (“Before coming to Roca, did you have a job for longer than three months?”) does not limit prior employment to the six months prior to eligibility, so some respondents might have counted sustained employment from well before their engagement with Roca.

3.4 Participant Engagement and Experiences with Roca (RQ3 & RQ4)

We assessed four indicators of Roca participant engagement with Roca: 1) number of TEP enrollments, 2) monthly rate of Youth Worker contacts, 3) monthly rate of program attendance, and 4) number of days actively engaged with Roca. We first examined these indicators overall and by Roca site. Next, we explored whether any of the risks or needs discussed in section 3.3 are linked to engagement in order to provide insight into what issues may either prevent young men from engaging with Roca or encourage them or their Youth Worker to ensure they are more actively engaged with Roca.

In Tables 3.4-1 we present the level of engagement overall and by site.

Table 3.4-1. Participant Engagement with Roca Overall and by Roca Site¹

Variable	Overall Mean (SE)/Percent	Boston Mean (SE)/Percent	Chelsea Mean (SE)/Percent	Holyoke Mean (SE)/Percent	Lynn Mean (SE)/Percent	Springfield Mean (SE)/Percent
<i>Any TEP Enrollments</i>	48.10%	30.43%	46.43%	56.93%	53.44%	61.03%
<i>Number of TEP Enrollments</i>	3.41 (6.37)	2.65 (7.12)	3.13 (6.50)	2.51 (3.59)	3.17 (6.35)	4.64 (5.96)
<i>Average Length of TEP Enrollments</i>	182.81 (219.46)	216.89 (240.73)	214.1 (261.68)	161.14 (113.66)	376.8 (306.72)	95.92 (81.00)
<i>Youth Worker Contacts per Month</i>	7.47 (4.26)	7.17 (4.00)	6.64 (5.69)	8.07 (2.80)	7.09 (3.01)	8.43 (3.44)
<i>Youth Worker Actual Contacts per Month</i>	5.04 (3.03)	4.81 (3.01)	4.78 (3.15)	5.26 (3.02)	5.49 (2.82)	5.27 (2.97)
<i>Rate of Successful Youth Worker Contacts</i>	67.86%	66.21%	73.27%	63.65%	76.47%	62.91%
<i>Participant Attendance per Month</i>	6.01 (6.96)	3.85 (4.69)	5.45 (6.93)	8.96 (8.05)	6.63 (6.32)	7.41 (7.90)
<i>Number of Post-Eligibility Terms</i>	1.03 (0.20)	1.02 (0.13)	1.04 (0.21)	1.02 (0.15)	1.07 (0.37)	1.02 (0.16)
<i>Time Actively Engaged in Roca in Days</i>	717.45 (503.50)	749.18 (519.71)	708.72 (520.01)	573.11 (352.96)	906.98 (550.24)	671.61 (472.3)

¹For dichotomous measures, percentages are displayed. For continuous measures, mean and standard deviation are displayed.

On average, Roca participants have slightly fewer than four TEP enrollments; however, this average is somewhat skewed by a high number of TEP enrollments among some Roca participants (one Roca participant has 54 enrollments), and just over half of all Roca participants (58.10%) have no TEP enrollments and the modal number of TEP enrollments is 0. Also, on average, TEP enrollments last about half a year (182.81 days). These findings all vary significantly by site, with lower rates and numbers of enrollments in Boston ($p < 0.001$) and shorter enrollments in Springfield ($p < 0.001$).

With respect to contacts overall, Youth Workers record an average of seven monthly actual contacts or attempted contacts. In addition, they record five actual contacts per month on average. These values are slightly less than the expected standards for Youth Workers (2 actual or 4 attempted per week, which equates to 8-16 contacts per month), but this may simply reflect the difficulty some Youth Workers have in reaching the young men on their caseloads on a consistent basis or it may be a result of their high caseloads. For the measure of overall Youth Worker contact, we focused on actual and attempted contact with a young man, and third-party contact. The average rate of successful contact is 67.85%. This rate of contact is higher in Chelsea and Lynn ($p < 0.001$).

Roca participants attend 6.01 programs per month on average; however, this finding varies notably by site. Roca participants in Boston attend far less programming (3.85), with Roca participants in Chelsea attending almost three more classes per month (5.45), and Roca participants in Springfield (8.43) and Lynn (7.09) and Holyoke (8.07) attending programming at an even higher rate ($p < 0.001$).

On average, most Roca participants have only one term (1.03). This finding varies little by site. Finally, on average, Roca participants are continuously engaged with Roca (i.e., did not disengage for longer than 30 days) for approximately two years (717.45 days), a finding that also varies by site. While Roca participants at the Boston, Chelsea, and Springfield sites are all engaged with Roca for just under two years, Roca participants in Lynn stay engaged for over two and a half years and Roca participants in Holyoke are engaged for only about a year and half ($p < 0.001$).

3.4.1 Justice Involvement, Criminal History, and Engagement with Roca

Next, we examined whether any of the risks or needs discussed in section 3.3 were associated with the four measures of engagement with Roca. We estimated a regression for each combination of a measure of engagement and a risk or need, controlling for the Roca participant's site and year of eligibility. Because more than half of all Roca participants have no TEP enrollments, instead of regressing the number or length of TEP enrollments on risks and needs, we only regress an indicator of any TEP enrollments on risks and needs using a logistic regression model. In addition, because having more than one term is rare and thus there is limited variability through which to explore relationships, we do not regress the number of terms on risks and needs.

In Table 3.4-3, we present the relationships between criminal justice variables and engagement with Roca.

Table 4.3-3. Bivariate Regressions of Roca Engagement on Criminal Justice History¹

Variable	Any TEP Enrollments ² Coefficient (SE)	Youth Worker Contacts per Month ³ Coefficient (SE)	Rate of Successful Youth Worker Contacts ³ Coefficient (SE)	Participant Attendance per Month ³ Coefficient (SE)	Time Actively Engaged with Roca ³ Coefficient (SE)
<i>Number of Arrests (n=1,390)</i>	-0.02 (0.01)	-0.03 (0.02)*	0.00 (0.00)	-0.06 (0.03)	-7.30 (2.23)**

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<i>Number of Prior Convictions (n=1,740)</i>	0.00 (0.01)	-0.02 (0.02)	0.00 (0.00)	-0.04 (0.03)	-3.64 (1.71)*
<i>Number of Prior Felony Convictions (n=1,740)</i>	0.00 (0.01)	-0.01 (0.03)	0.00 (0.00)	-0.04 (0.06)	-5.96 (2.97)*
<i>Number of Prior Incarcerations (n=1,740)</i>	0.00 (0.01)	-0.04 (0.02)	0.00 (0.00)	-0.07 (0.04)	-7.39 (2.47)**
<i>Number of Prior Felony Incarcerations (n=1,740)</i>	0.00 (0.01)	-0.04 (0.04)	0.00 (0.00)	-0.04 (0.09)	-10.86 (3.79)**
<i>Any Prior Arraignments for a Violent Offense (n=1,740)</i>	0.02 (0.11)	0.01 (0.02)	0.02 (0.01)	-0.41 (0.35)	-27.26 (23.01)
<i>Any Prior Arraignments for a Drug Offense (n=1,740)</i>	-0.30 (0.11)**	-0.29 (0.18)	-0.02 (0.01)	-1.22 (0.32)***	-38.99 (23.42)
<i>Any Prior Arraignments for a Weapons Offense (n=1,740)</i>	-0.21 (0.11)	-0.25 (0.20)	0.00 (0.01)	-0.86 (0.33)**	-53.33 (22.17)*

* p<.05, ** p<.01, *** p<.001

¹All models control for Roca Site, year of eligibility, and are run with robust standard errors.

²Logistic regression model.

³Ordinary least squares regression model.

⁴Reference category: Other Less-serious Offense.

A few patterns stand out from these analyses. First, in general, prior criminal justice involvement only has a minimal relationship with engagement with Roca and the success rate of Youth Worker contacts is not affected by prior criminal justice history. Enrollment in TEP is lower among those with a drug offense history. Monthly Youth Worker contacts are lower among individuals with a higher number of previous self-reported arrests. And program attendance is lower for individuals with a drug or weapons offense history. The measure of engagement most affected by criminal justice history is the amount time one engages with Roca: with the exception of violent and drug offenses, increases in any other type of criminal justice measure are linked to fewer days engaging with Roca.

3.4.2 Social Needs and Engagement with Roca

Next, we examined the relationship between employment and education and Roca engagement. The results are shown in Table 3.4-4. While education is not related to any measure of engagement, current or recent employment is linked to all measures of engagement except for Youth Worker contact. In all cases, recent (within the last 6 months) or current employment reduces engagement. This finding may speak to lower-than-average levels of risks and needs among individuals who are or have been recently employed, and therefore have a lessened reliance on Roca programming to fulfill those needs. Roca participants with recent employment are more likely to have high school degrees or equivalent (46.5% vs. 38.3%, p<0.01), are less dependent on public assistance (60.0% vs. 84.4%, p<0.001), are on average older at the time of eligibility (21.2 vs. 21.4, p<0.01), and have fewer past arrests (5.3 vs. 5.9, p<0.05) and felony incarcerations (1.2 vs. 1.5, p<0.05).

Table 3.4-4. Bivariate Regressions of Roca Engagement on Employment and Education Status¹

Variable	Any TEP Enrollments ² Coefficient (SE)	Youth Worker Contacts per Month ³ Coefficient (SE)	Rate of Successful Youth Worker Contacts ³ Coefficient (SE)	Participant Attendance per Month ³ Coefficient (SE)	Time Actively Engaged with Roca ³ Coefficient (SE)
<i>Currently Employed of Employed in the Last 6 Months (n=1,740)</i>	-0.55 (0.11)***	0.05 (0.19)	-0.05 (0.01)***	-0.67 (0.32)*	-111.72 (22.58)***

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High School Degree or GED (n=1,524)	-0.12 (0.12)	-0.13 (0.18)	0.01 (0.01)	-0.26 (0.34)	-41.23 (23.82)
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* p<.05, ** p<.01, *** p<.001

¹All models control for Roca Site, year of eligibility, and are run with robust standard errors.

²Logistic regression model.

³Ordinary least squares regression model.

We also explored the relationship between a Roca participant’s home life and their engagement with Roca, the results of which are displayed in Table 3.4-5. Being a current or expectant parent does not have a relationship with Roca engagement, but housing situation does. Those who are less stably housed (in communal housing or unsheltered) are more likely to enroll in TEP and to attend classes. This may reflect the opposite of what was observed for employment; those with less stable housing are in greater need of the services Roca provides.

Table 3.4-5. Bivariate Regressions of Roca Engagement on Home Life¹

Variable	Any TEP Enrollments ² Coefficient (SE)	Youth Worker Contacts per Month ³ Coefficient (SE)	Rate of Successful Youth Worker Contacts ³ Coefficient (SE)	Participant Attendance per Month ³ Coefficient (SE)	Time Actively Engaged with Roca ³ Coefficient (SE)
Current Housed in Communal Housing or Unsheltered (n=1,140)	0.60 (0.21)**	0.36 (0.39)	0.00 (0.01)	2.12 (0.70)**	41.53 (48.33)
Current or Expectant Father (n=1,521)	0.06 (0.12)	-0.21 (0.18)	0.05 (0.02)**	-0.43 (0.34)	16.73 (24.67)

* p<.05, ** p<.01, *** p<.001

¹All models control for Roca Site, year of eligibility, and are run with robust standard errors.

²Logistic regression model.

³Ordinary least squares regression model.

Finally, in Table 3.4-6 we present the relationships between use of public assistance and physical and mental health and Roca engagement. Although Roca does provide some public assistance services (i.e., the SNAP Specialist in Springfield), individuals with such needs may find it more difficult to engage with Roca because of these needs. Alternatively, in cases where access to public assistance/medication is currently meeting their needs, they may find it easier to engage with Roca as they do not need to focus on more pressing concerns (e.g., finding housing, paying for medical bills).

Table 3.4-6. Bivariate Regressions of Roca Engagement on Public Assistance and Medication Use¹

Variable	Any TEP Enrollment ² Coefficient (SE)	Youth Worker Contacts per Month ³ Coefficient (SE)	Rate of Successful Youth Worker Contacts ³ Coefficient (SE)	Participant Attendance per Month ³ Coefficient (SE)	Time Actively Engaged with Roca ³ Coefficient (SE)
Any Use of Public Assistance (n=1,740)	0.92 (0.13)***	0.48 (0.26)	0.12 (0.02)***	1.99 (0.35)***	217.78 (25.73)***
Use of Housing Assistance (HUD) (n=1,740)	0.05 (0.17)	0.68 (0.30)*	0.00 (0.01)	0.27 (0.46)	-6.55 (38.19)

<i>Use of Medical Assistance (MassHealth, Medicaid) (n=1,740)</i>	0.67 (0.11)***	0.22 (0.21)	0.09 (0.01)***	1.31 (0.34)***	144.01 (23.68)***
<i>Use of Food Assistance (SNAP, WIC) (n=1,740)</i>	0.56 (0.11)***	0.43 (0.19)*	0.06 (0.01)***	1.52 (0.35)***	68.99 (23.35)**
<i>Use of Benefits for Those with Disabilities (SSI, SSDI) (n=1,740)</i>	0.17 (0.16)	0.46 (0.27)	0.03 (0.02)*	1.04 (0.52)*	49.99 (34.05)
<i>Use of Income-Based Benefits (n=1,740)</i>	0.15 (0.19)	0.12 (0.31)	0.01 (0.02)	0.02 (0.52)	-12.19 (44.99)
<i>Use of Other Benefits (n=1,740)</i>	-0.02 (0.38)	0.65 (0.92)	0.10 (0.04)**	3.97 (2.12)	63.86 (90.06)
<i>History of Counseling (n=1,506)</i>	0.26 (0.12)*	0.61 (0.19)**	0.03 (0.01)*	1.26 (0.36)***	-41.24 (23.68)
<i>Current or History of Use of Medication or a History of Hospitalizations (n=1,740)</i>	0.53 (0.11)***	0.67 (0.19)***	0.07 (0.01)***	1.79 (0.35)***	45.93 (22.44)*

* p<.05, ** p<.01, *** p<.001

¹All models control for Roca Site, year of eligibility, and are run with robust standard errors.

²Logistic regression model.

³Ordinary least squares regression model.

In general, a history of physical health issues (as measured by use of medication or hospitalization) and of mental health issues (as measured by use of counseling) are linked to greater engagement with Roca. There is also a clear and consistent finding that, on all measures, Roca participants who are receiving or have received medical and food assistance have higher rates of engagement with Roca. The exception is housing and income-based assistance for which there is no relationship with engagement.

3.4.3 Participant Engagement with Roca – Survey Sample

The survey asked respondents a number of questions to get a sense of Roca participants’ engagement with Roca, including how they got involved with Roca and why, whether they’ve ever stopped engaging, and what kinds of activities they engaged with at Roca.

Most survey respondents (40%) were referred to Roca, walked in on their own (22%), were referred by a Youth Worker (16%), or were mandated by a judge (15%). Some respondents (7%) provided an open-ended response for how they were connected to Roca, such as through a school or jail. There was no significant variation in engagement type across site or by whether the young man became eligible before or during the COVID-19 pandemic.

3.4.3.1 Reasons for Engaging with Roca

Respondents were also asked for reasons they engage with Roca (see Table 3.4-7). Respondents reported that their Youth Worker is an important reason they engage, with more than two thirds of respondents saying they engage because they trust their Youth Worker and more than half saying they engage because their Youth Worker keeps them engaged. Other respondents (42%) reported that they engage because of feeling safe with Roca. Respondents’ reasons for engaging with Roca also give some sense of their needs. For example, 38% of respondents said they engage with Roca because they need help with something employment related, just under a third report wanting help finding housing or shelter, and the same proportion report needing help obtaining SNAP benefits.

We also examined differences in reasons for engaging by site and eligibility date (pre- or during COVID-19). There is significant variation by site on trusting their Youth Workers (p<.05): 82% of Lynn respondents report trusting their Youth Worker as a reason for engaging with Roca, whereas in Chelsea,

58% report the same. Engaging with Roca because respondents feel safe with Roca also varies by site ($p < .01$); more than two thirds in Lynn versus less than 30% in Holyoke) and eligibility date ($p < .05$; 45% pre-COVID-19 versus 28% during COVID-19). Having friends at Roca as a reason for engaging also differs by site ($p < .001$; 45% in Lynn versus 11% in Springfield) and eligibility date (24% pre-COVID-19 versus 12% during COVID-19). Finally, engaging with Roca because the respondent wanted to talk to someone was selected significantly more often ($p < .05$) among those with a pre-COVID-19 eligibility date (17%) versus during COVID-19 (5%).

Table 3.4-7. Reasons for Engaging with Roca Now by Site

Variable	Overall Percent	Boston Percent	Chelsea Percent	Holyoke Percent	Lynn Percent	Springfield Percent
<i>Trusts Youth Worker</i>	69.87%	73.47%	57.50%	70.73%	81.63%	72.29%
<i>Feels safe with Roca</i>	42.38%	32.65%	41.25%	29.27%	67.35%	40.96%
<i>Youth Worker keeps R engaged</i>	50.66%	51.02%	46.25%	48.78%	57.14%	51.81%
<i>Needs help finding a job, doing a resume or looking for job training</i>	38.08%	48.98%	36.25%	31.71%	32.65%	39.76%
<i>Have friends at Roca</i>	21.85%	12.24%	25.00%	21.95%	44.90%	10.84%
<i>A judge, DA, or probation officer says R has to</i>	10.60%	20.41%	8.75%	12.20%	6.12%	8.43%
<i>Needs clothing or food</i>	5.96%	2.04%	3.75%	4.88%	14.29%	6.02%
<i>Wants to talk to someone</i>	14.57%	16.33%	12.50%	14.63%	26.53%	8.43%
<i>Wants counseling</i>	13.25%	6.12%	12.50%	14.63%	18.37%	14.46%
<i>Wants help finding housing or shelter</i>	31.46%	36.73%	23.75%	36.59%	28.57%	34.94%
<i>Needs help with a court case</i>	15.56%	16.33%	17.50%	21.95%	12.24%	12.05%
<i>Wants services for kids</i>	4.97%	4.08%	1.25%	2.44%	10.20%	7.23%
<i>Needs help with TANF (welfare)</i>	4.97%	4.08%	3.75%	7.32%	4.08%	6.02%
<i>Needs help with SNAP (food stamps)</i>	31.46%	26.53%	31.25%	21.95%	44.90%	31.33%
<i>Needs help with Medicaid</i>	4.64%	4.08%	3.75%	2.44%	6.12%	6.02%
<i>Needs help filing for unemployment</i>	9.93%	8.16%	7.50%	7.32%	14.29%	12.05%

Respondents were also asked if the reasons they engage with Roca now are due to the COVID-19 pandemic. Although overall percentages did not differ significantly, large proportions of respondents indicated that their reasons for engaging with Roca were related to the pandemic. Of those responding, 74% said they needed help finding a job, doing a resume or looking for job training, 70% said they wanted counseling, 78% reported needing help finding housing or shelter, 57% needed help with a court case, 55% needed help getting SNAP benefits, 64% needed help with Medicaid, and 53% needed help filing for unemployment due to the impact of COVID-19. There were no significant differences in these

responses by site or by whether respondents became eligible for Roca before or during the COVID-19 pandemic period.

One-fifth of respondents reported a time when they stopped engaging with Roca. The most common reasons selected were that the respondents got arrested (29%) or incarcerated (22%). A little more than one-fifth of respondents who stopped engaging at some point said they did so because they simply did not like Roca. Of those who stopped engaging at some point, 19% said it was because they did not like changes Roca made to adjust to COVID-19. There were no significant differences in these responses by site or eligibility date (pre- versus during COVID-19).

3.4.3.2 Engagement in Activities at Roca

Respondents were also asked what types of activities they had ever done at Roca. Overall, a majority of Roca participants reported meeting with their Youth Worker, and large proportions also engaged in classes or other formal programming including Hi-SET/GED classes, work crew/TEP, CBT, vocational classes, WFR class, and Healthy Habits. Many respondents also reported getting help obtaining a job, benefits, or a permit or license. Nearly half reported just hanging out at Roca.

Several activities varied notably by site (see Table 3.4-8), including vocational classes ($p<.05$), Hi-SET/GED ($p<.001$), Healthy Habits/substance use classes ($p<.01$), Core Circle ($p<.05$), counseling ($p<.05$), culinary ($p<.001$), art class ($p<.05$), studio ($p<.001$), and just hanging out ($p<.05$). Almost all the activities that Roca participants reported also differed significantly based on eligibility pre- versus during COVID-19: Roca participants who were eligible before COVID-19 were considerably more likely to engage in all activities except for counseling, help getting housing, meeting with a Youth Worker, eating a meal, and just hanging out ($p<.001-.05$). These findings are likely due to the impact of the COVID-19 pandemic on Roca's operations and the ability to engage with Roca participants on-site and in person. In other cases, Roca participants who became eligible for Roca during COVID-19 may be less likely to be engaged in multiple activities because they did not have a foundation of engagement in person prior to the COVID-19 shutdowns and adjustments.

Table 3.4-8. Activities Done at Roca

Variable	Overall Percent	Boston Percent	Chelsea Percent	Holyoke Percent	Lynn Percent	Springfield Percent
<i>Vocational classes</i>	40.20%	30.61%	51.25%	40.00%	51.02%	28.92%
<i>Work Crew/TEP</i>	45.85%	30.61%	47.50%	50.00%	48.98%	49.40%
<i>Hi-SET/GED</i>	49.17%	51.02%	45.00%	60.00%	63.27%	38.55%
<i>Healthy Habits/substance abuse class</i>	35.88%	18.37%	37.50%	42.50%	51.02%	32.53%
<i>Work Force Readiness (WFR) class</i>	39.20%	36.73%	27.50%	47.50%	46.94%	43.37%
<i>Cognitive Behavioral Theory (CBT)</i>	41.53%	44.90%	36.25%	50.00%	51.02%	34.94%
<i>Core Circle</i>	22.92%	12.24%	22.50%	32.50%	36.73%	16.87%
<i>Community Dinner</i>	23.92%	18.37%	22.50%	25.00%	36.73%	20.48%
<i>Counseling</i>	30.90%	18.37%	36.25%	22.50%	42.86%	30.12%
<i>Culinary</i>	15.95%	2.04%	25.00%	2.50%	26.53%	15.66%
<i>Art class</i>	8.97%	0.00%	7.50%	5.00%	18.37%	12.05%
<i>Studio</i>	13.29%	16.33%	1.25%	15.00%	8.16%	25.30%

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<i>Exercise/work out/play sports</i>	30.23%	20.41%	35.00%	32.50%	36.73%	26.51%
<i>Help getting housing</i>	8.97%	2.04%	10.00%	5.00%	10.20%	13.25%
<i>Help getting a job</i>	36.21%	46.94%	35.00%	27.50%	34.69%	36.14%
<i>Help getting benefits (SNAP, TANF, etc.)</i>	28.57%	24.49%	25.00%	22.50%	32.65%	34.94%
<i>Help getting permit/license</i>	28.24%	28.57%	33.75%	27.50%	24.49%	25.30%
<i>Meet with Youth Worker</i>	55.81%	44.90%	53.75%	65.00%	59.18%	57.83%
<i>Ate a meal</i>	42.52%	38.78%	50.00%	37.50%	48.98%	36.14%
<i>Just hang out</i>	44.19%	48.98%	52.50%	42.50%	51.02%	30.12%

The survey also asks respondents a number of questions about Roca’s CBT curriculum – whether they know about it, whether they have engaged with the curriculum, and which skills they have worked on. Overall, 83% of respondents are aware of Roca’s CBT approach. There is no significant variation by site, but respondents with a pre-COVID eligibility date were more likely ($p<.001$) to know about CBT than those who got involved during COVID (87% versus 68%, respectively). The majority of respondents reported having done at least some CBT: 73% have had a class with a worksheet, 57% report their Youth Worker talked to them about skills to use, and 35% said their Youth Worker has used key cards with them. Only 5% said they had never done CBT or were not sure whether they had or not. No significant differences were observed by site in terms of respondents engaging in CBT.

Respondents who were eligible pre-COVID-19 were significantly more likely to have a formal CBT class (78% versus 46%, $p<.001$) than those who were eligible during COVID-19, but the two groups were equally likely to have had CBT practice with their Youth Workers, either through conversation or with key cards. Roca participants with eligibility dates during COVID-19 were more likely never to have done any CBT (11%) than those with pre-COVID-19 dates (2%; $p<.01$). These findings are likely the result of the programming interruptions that occurred as a result of the COVID-19 pandemic.

3.4.4 Satisfaction with Roca – Survey Sample

We asked survey respondents several questions about their satisfaction with Roca. Overall, 82% said they were very satisfied with Roca, 18% said somewhat satisfied, and less than one percent said they were not very satisfied. Respondents had the opportunity to explain why they felt Roca was or was not helpful; many of these responses related to feeling cared for and supported by Roca staff, Roca helping them “stay out of trouble”, and the instrumental support they receive (e.g., help with SNAP and other benefits). There were no notable differences in satisfaction by site or eligibility date (pre- versus during COVID-19).

Respondents were also asked to indicate, on a scale from 1 to 5, how much they agreed with a number of statements about Roca (see Exhibit 3.4-9). Overall, Roca participants expressed a great deal of satisfaction with Roca, with each statement ranked at least a 4.41, on average. Statements with the highest agreement included “I have a strong and trustworthy relationship with my Youth Worker”, “My Youth Worker treats me with respect when we are in my neighborhood or at my house”, and “I feel safe with my Youth Worker”. Scores for the “I feel safe with my Youth Worker” and “Roca did a good job responding to the COVID-19 pandemic” statements were both slightly, but significantly ($p<.05$) lower among respondent with eligibility dates during COVID-19. We did not find any variation in satisfaction based on engagement type (mandated, referred, or walk-in). Responses did not vary notably by site.

Table 3.4-9. Overall Participant Satisfaction with Roca*

Variable	Overall Mean (SD)
<i>My YW explains everything to me in a way that is easy to understand</i>	4.59 (0.93)
<i>My YW listens carefully to me</i>	4.65 (0.91)
<i>My YW and the other Roca staff work well together to address my needs</i>	4.53 (0.92)
<i>My YW gives me information and resources that help me make safe choices</i>	4.62 (0.93)
<i>My YW spends enough time with me</i>	4.41 (0.99)
<i>I have a strong and trustworthy relationship with my YW</i>	4.75 (0.77)
<i>My YW treats me with respect when we are in my neighborhood or at my house</i>	4.73 (0.80)
<i>Other Roca staff (e.g., directors, crew supervisor, educator) treats me with respect</i>	4.63 (0.82)
<i>Before COVID-19, I felt safe at the Roca building</i>	4.52 (1.04)
<i>I feel safe with my YW</i>	4.71 (0.79)
<i>I feel safe with other Roca staff</i>	4.55 (0.88)
<i>Roca did a good job responding to the COVID-19 pandemic</i>	4.50 (1.01)

* Responses did not vary notably by site.

3.5 Roca Participant Employment and Recidivism Outcomes (RQ5)

To evaluate the relationship between various elements of Roca and the success of Roca participants, we examined employment and recidivism outcomes for Roca participants. Specifically, for employment outcomes we examined the rate of obtaining unsubsidized employment (i.e., employment outside of TEP), the time to obtaining first unsubsidized employment, and the length of unsubsidized employment; for recidivism we examined the rate of becoming convicted for a new offense, time to first conviction for a new offense, rate of becoming convicted for a new violent offense, and the time to first conviction for a violent offense.

First, we explore these outcomes by site in Table 3.5-1. In addition, Exhibit 3.5-1 plots the time to first employment, conviction, and violent conviction for those who remain at Roca for four years or less. All measures are calculated for the entire span of time available for each participant to ensure as large a sample as possible. Later models directly account for time between Roca eligibility and the last date reflected in this sample to ensure time at risk is properly addressed. The x-axis plots the time in years and the y-axis plots the rate of individuals who have not yet experienced that event. The curve illustrates the pattern by which individuals experience these events over time and across the sample. Almost 40 percent of Roca participants obtain unsubsidized employment (38%). However, the rate of unsubsidized employment varies dramatically by site, with low rates in Holyoke (17%) and very high rates in Lynn (48%) ($p < 0.001$). Based on the survival curves shown in Exhibit 3.5-1, most of the individuals who are going to obtain employment have done so by two years into the program. Convictions and violent convictions are relatively consistent across sites, with the exception of Holyoke, which has a low rate of both.

We also analyzed the one-, two-, and three-year recidivism rates for Roca participants.²² We find that 15% of Roca participants recidivate within one year after eligibility, 24% recidivate within two years, and

²² In all cases, recidivism is defined as a re-incarceration, and is measured in three increments: percent who recidivate within one year of eligibility, percent who recidivate within two years of eligibility, and percent who recidivate within three years of eligibility. The denominator for these rates includes only individuals who have had that much time since eligibility and the date when Criminal Offender Record Information provided by the

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30% recidivate within three years. A similar pattern holds for violent offenses: 5% of Roca participants recidivate for a violent offense within one year after eligibility, 10% within two years, and 13% within three years. For Roca participants with violent history, 7% recidivate for a violent offense within year, 13% within two years, and 18% within three years. Among all Roca participants in Massachusetts with a violent history who recidivate within one year, only 37% recidivate for a violent offense, and among Roca participants with a violent history who recidivate in two years and three years, the only 43% and 46% recidivate for a violent offense, respectively. All other Roca participants with a violent history who recidivate are committing non-violent offenses.²³

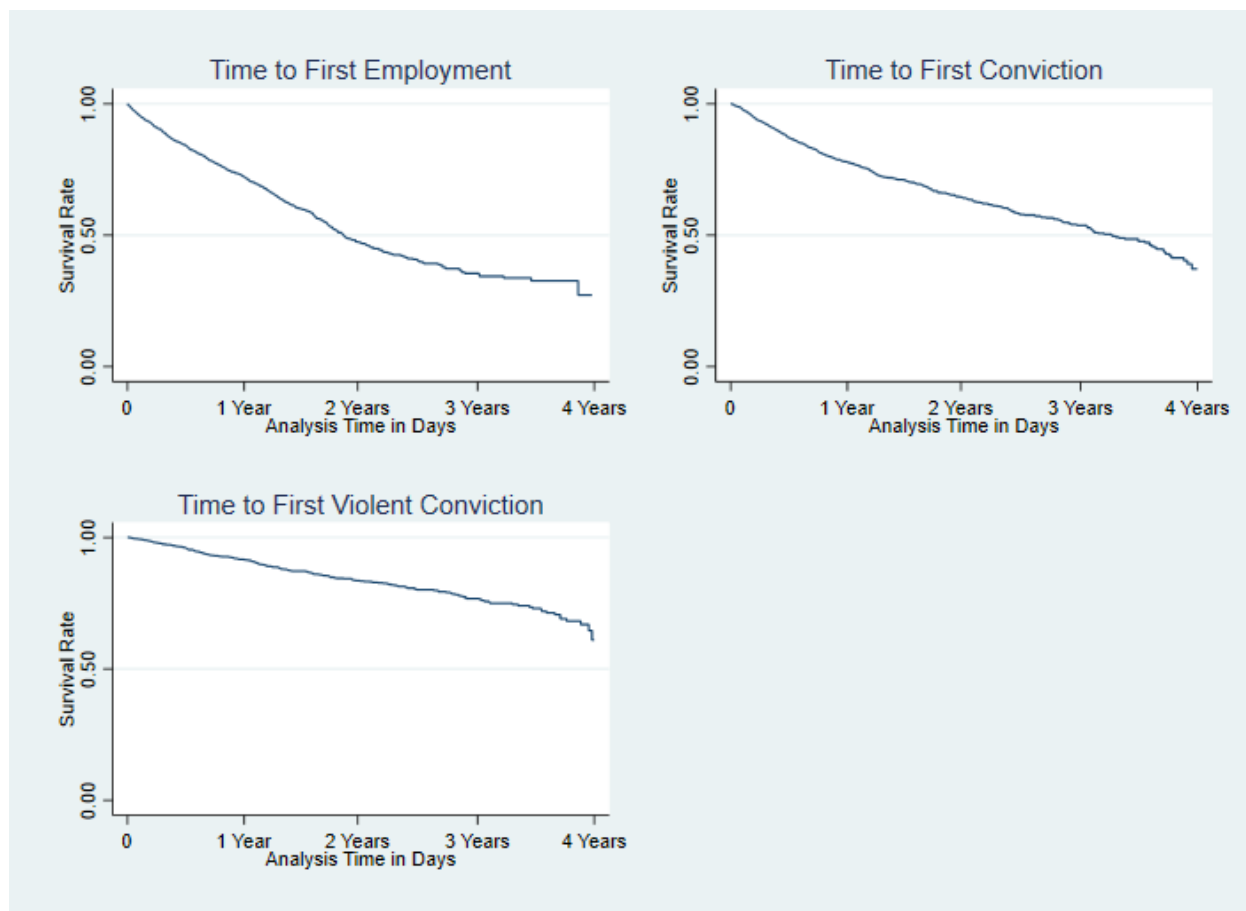
Table 3.5-1. Participant Outcomes Overall and by Roca Site

Variable	Overall Mean (SE)/ Percent	Boston Mean (SE)/ Percent	Chelsea Mean (SE)/ Percent	Holyoke Mean (SE)/ Percent	Lynn Mean (SE)/ Percent	Springfield Mean (SE)/ Percent
Employment Outcomes						
<i>Any Unsubsidized Employment</i>	38.33%	43.47%	36.38%	16.79%	47.70%	38.00%
<i>Time to First Unsubsidized Employment</i>	321.42 (257.71)	357.92 (454.18)	563.67 (622.79)	486.88 (358.55)	373.77 (431.12)	408.40 (412.68)
<i>Average Length of Unsubsidized Employment</i>	429.61 (489.97)	278.53 (280.81)	287.14 (226.69)	394.78 (228.96)	342.92 (280.96)	374.69 (239.55)
Recidivism Outcomes						
<i>Any New Convictions</i>	31.49%	33.26%	34.38%	16.06%	30.46%	31.86%
<i>Time to First New Conviction</i>	434.28 (413.3)	450.99 (408.44)	461.36 (453.2)	126.05 (91.7)	484.66 (387.95)	418.54 (398.72)
<i>Any New Violent Convictions</i>	13.79%	14.13%	15.18%	7.30%	12.64%	14.40%
<i>Time to First New Violent Conviction</i>	511.13 (444.73)	503.55 (406.47)	516.51 (476.6)	205 (179.21)	521 (345.77)	550.75 (487.9)

Exhibit 3.5-1. Kaplan-Meier Survival Curves of Time to First Unsubsidized Employment, Conviction, and Conviction for a Violent Offense

Department of Criminal Justice Information Services in the Commonwealth of Massachusetts was last supplied: December 20, 2020.

²³ The Massachusetts Juvenile Justice Pay-for-Success Evaluation Tracker for January 17, 2019 reports that high-risk young men under 24 years of age had a three-year recidivism rate for new crimes of 42% in 2012, 48% in 2013, and 47% in 2014, all of which are higher than the recidivism rates for Roca. Statewide recidivism rates provide context but should not be used to infer program impact. The statewide rate, by definition, includes Roca participants, samples are not matched on prior risks, communities outside those served by Roca are included, and exact definitions for recidivism and minor calculation decisions could result in big differences in the recidivism rates and may not reflect actual levels of recidivism.



3.5.1 The Relationship between Roca Engagement and Outcomes

Next, we explore the relationship between employment and recidivism outcomes and measures of Roca engagement. We use measures of Roca engagement discussed in Section 3.4: the monthly rate of Youth Worker actual and attempted contact, monthly rate of program attendance, success rate of Youth Worker contact, and an indication of TEP involvement. We analyzed the relationship of each of these measures with the presence of and time to unsubsidized employment, new convictions, and new violent convictions. To account for possible confounding factors, we control for a variety of measures with actual or theoretical links to program engagement, employment, and recidivism. These measures are derived from those discussed in Section 3.3: age at eligibility, race/ethnicity, an indication of any medical issues (i.e., hospitalizations or medication use), an indication of counseling, an employment history, a high school education or equivalent, any use of public assistance, whether an individual is a current or expectant parent, whether an individual is housed less stably (communal housing or unsheltered), number of arrests before eligibility, prior arrests of drug offense, prior arrests for weapons offense, prior arrests for violent offenses, Roca site, and year of eligibility. In addition, for convictions and violent convictions, we control for whether an individual had convictions or violent convictions, respectively, prior to their eligibility date.

To highlight the relationship between the control variables and our outcome measures, we display regression results with only these variables in Table 3.5-2. These results show that:

- Roca participants who were older when they enrolled in Roca and participants who had a history of employment were more likely to obtain unsubsidized employment and were less likely to recidivate than younger participants or participants without a history of employment.

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- Roca participants who had a higher number of prior arrests and participants who had prior drug offenses were less likely to obtain unsubsidized employment than participants with fewer prior arrests or no prior drug offenses.
- Roca participants who had higher number of prior arrests and participants who had prior weapons and violent offenses were more likely to recidivate than participants who had fewer prior arrests or no weapons or violent offenses.
- There are also some relationship patterns between year of eligibility and outcomes, but in these models, we are unable to attribute these relationships to anything related to Roca programming or external factors.

Finally, while Roca site is unrelated to either type of conviction, individuals in Boston have a much higher likelihood of employment, a factor likely due to greater opportunity. In addition, even when controlling for year of eligibility and a host of other risk factors, individuals in Holyoke still have a much lower rate of employment.

Table 3.5-2. Multivariate Regressions of Employment and Criminal Justice Outcomes on Characteristics at Eligibility(n=1,333)¹

Variable	Unsubsidized Employment Coefficient (SE) ²	Unsubsidized Employment Hazard Ratio (SE) ³	Convictions Coefficient (SE) ²	Convictions Hazard Ratio (SE) ³	Violent Convictions Coefficient (SE) ²	Violent Convictions Hazard Ratio (SE) ³
<i>Age at Eligibility</i>	0.10 (0.04)*	1.06 (0.02)**	-0.14 (0.05)**	0.93 (0.02)**	-0.13 (0.05)**	0.91 (0.04)*
<i>Race/Ethnicity⁴</i>						
<i>Black/African American</i>	-0.01 (0.35)	0.96 (0.17)	0.14 (0.43)	1.01 (0.02)	-0.15 (0.45)	0.87 (0.28)
<i>Bi/Multi-Racial</i>	0.39 (0.57)	1.22 (0.30)	-0.22 (0.59)	0.91 (0.27)	0.21 (0.62)	1.16 (0.53)
<i>Other Race</i>	-0.15 (0.68)	0.85 (0.26)	0.38 (0.99)	1.11 (0.42)	0.29 (0.83)	1.23 (0.71)
<i>Hispanic/Latino</i>	0.10 (0.33)	1.03 (0.17)	-0.08 (0.40)	0.94 (0.18)	0.16 (0.42)	1.07 (0.33)
<i>History of Hospitalizations or Medications</i>	-0.12 (0.21)	0.97 (0.10)	0.32 (0.24)	1.17 (0.13)	0.28 (0.23)	1.25 (0.22)
<i>History of Counseling</i>	0.24 (0.22)	1.08 (0.11)	-0.33 (0.24)	0.87 (0.10)	-0.32 (0.24)	0.78 (0.14)
<i>History of Employment</i>	0.9 (0.20)***	1.52 (0.13)***	-0.28 (0.21)	0.87 (0.10)	-0.45 (0.23)*	0.69 (0.12)*
<i>High School Degree or GED</i>	0.27 (0.19)	1.21 (0.11)*	-0.14 (0.22)	0.93 (0.1)	0.01 (0.22)	1.02 (0.16)
<i>Any Public Assistance</i>	0.04 (0.25)	0.98 (0.12)	-0.12 (0.28)	0.95 (0.13)	0.26 (0.29)	1.19 (0.27)
<i>Father or Expected Father</i>	0.27 (0.20)	1.09 (0.)	0.01 (0.22)	1.02 (0.11)	0.10 (0.22)	1.11 (0.18)
<i>Less Stably Housed</i>	0.30 (0.34)	1.22 (0.19)	0.44 (0.43)	1.18 (0.21)	-0.33 (0.43)	0.76 (0.23)
<i>Number of Arrests</i>	-0.04 (0.02)*	0.98 (0.01)*	0.04 (0.02)*	1.02 (0.01)*	0.04 (0.02)*	1.02 (0.01)*

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<i>Any Prior Arraignments for a Violent Offense</i>	0.66 (0.24)**	1.39 (0.16)**	0.48 (0.30)	1.31 (0.22)	0.80 (0.35)*	1.95 (0.58)*
<i>Any Prior Arraignments for a Drug Offense</i>	-0.20 (0.20)	0.88 (0.08)	0.48 (0.22)*	1.33 (0.14)**	0.04 (0.22)	1.05 (0.17)
<i>Any Prior Arraignments for a Weapons Offense</i>	-0.46 (0.24)	0.80 (0.09)*	0.82 (0.28)	1.58 (0.23)**	1.13 (0.29)***	2.45 (0.58)***
<i>Any Prior Convictions</i>	--	--	1.81 (0.28)***	2.96 (0.50)***	--	--
<i>Any Prior Violent Convictions⁵</i>	--	--	--	--	0.22 (0.24)	1.20 (0.22)
Roca Site						
<i>Boston</i>	0.85 (0.29)**	1.35 (0.18)*	-0.49 (0.32)	0.75 (0.11)	-0.24 (0.31)	0.82 (0.19)
<i>Lynn</i>	0.50 (0.35)	1.02 (0.15)	-0.17 (0.39)	0.83 (0.15)	-0.36 (0.38)	0.70 (0.20)
<i>Springfield</i>	0.24 (0.24)	1.14 (0.14)	-0.22 (0.29)	0.87 (0.12)	0.01 (0.28)	0.99 (0.21)
<i>Holyoke</i>	-1.10 (0.41)**	0.43 (0.11)**	-0.04 (0.52)	0.92 (0.28)	0.10 (0.53)	1.07 (0.47)
Year of Eligibility⁶						
<i>2014</i>	-1.07 (0.42)*	0.60 (0.12)**	0.36 (0.44)	1.14 (0.26)	0.51 (0.48)	1.45 (0.54)
<i>2015</i>	-0.63 (0.44)	0.78 (0.16)	-0.10 (0.45)	1.04 (0.24)	0.38 (0.49)	1.40 (0.54)
<i>2016</i>	-0.83 (0.45)	0.74 (0.15)	-0.21 (0.46)	1.04 (0.25)	0.47 (0.49)	1.54 (0.60)
<i>2017</i>	-0.56 (0.44)	0.80 (0.16)	-0.91 (0.47)	0.73 (0.18)	-0.23 (0.48)	0.94 (0.37)
<i>2018</i>	-1.30 (0.44)**	0.60 (0.12)*	-1.06 (0.47)*	0.72 (0.18)	-0.47 (0.50)	0.78 (0.33)
<i>2019</i>	-1.69 (0.47)***	0.52 (0.12)**	-2.59 (0.61)***	0.25 (0.10)***	-1.45 (0.70)*	0.32 (0.20)
<i>2020</i>	0.00 (0.00)	0.00 (0.00)	-3.36 (1.14)***	0.10 (0.10)*	-1.33 (1.14)	0.38 (0.41)

* p<.05, ** p<.01, *** p<.001

¹All models run with robust standard errors.

²Logistic regression model.

³Cox proportional hazards regression model.

⁴Reference category: white, non-Hispanic

⁵Reference category: Chelsea

⁶Reference category: 2013

Next, we separately added the four measures of engagement to these models. The results of these regressions are presented in Table 3.5-3. These regressions include and account for all of the variables described in Table 3.5-2, but for simplicity, we only present the relationships between measures of engagement and the outcome measures. Results for the control variables did not vary notably as a result of adding the engagement measures. We used the Bonferroni correction (Dunn, 1961; Streiner & Norman, 2011) to correct for the fact that the potential for Type I errors (i.e., rejecting a null hypothesis that is in fact true) increases as the number of statistical tests increases. We adjust our starting critical p level of 0.05 for the twelve tests we perform for each model and site (three outcomes and four engagement measures) leaving us with an adjusted p value of 0.00417.

Table 3.5-3. Multivariate Regressions of Employment and Criminal Justice Outcomes on Roca Engagement(n=1,333)¹

Variable	Unsubsidized Employment Coefficient (SE) ²	Unsubsidized Employment Hazard Ratio (SE) ³	Convictions Coefficient (SE) ²	Convictions Hazard Ratio (SE) ³	Violent Convictions Coefficient (SE) ²	Violent Convictions Hazard Ratio (SE) ³
<i>Any TEP Enrollments</i>	0.06 (0.19)	0.88 (0.08)	-1.24 (0.22)***	0.50 (0.05)***	-0.83 (0.22)***	0.50 (0.08)***
<i>Participant Attendance per Month</i>	0.14 (0.01)**	1.03 (0.00)***	0.03 (0.02)	1.01 (0.01)	0.02 (0.02)	1.01 (0.01)
<i>Youth Worker Contacts per Month</i>	0.34 (0.03)***	1.12 (0.07)***	0.15 (0.03)***	1.09 (0.01)***	0.08 (0.04)	1.07 (0.03)*
<i>Rate of Successful Youth Worker Contacts</i>	4.89 (0.55)***	13.29 (3.60)***	-0.30 (0.55)	0.71 (0.19)	0.51 (0.67)	1.26 (0.56)

* p<.00417, ** p<.001, *** p<.0001

¹All models run with robust standard errors.

²Logistic regression model.

³Cox proportional hazards regression model.

As shown in Table 3.5-3, programming and Youth Worker contact are linked to increased odds and reduced time to unsubsidized employment. Although TEP enrollment is not linked to unsubsidized employment, it is associated with reductions in the likelihood of any new conviction and a violent new conviction. The monthly rate of Youth Worker contact is positively associated with the likelihood of conviction, suggesting that higher levels of Youth Worker contact are associated with a greater chance of conviction for a new offense. While this may sound counterintuitive, it is likely a product of two factors. First, as individuals struggle, Roca Youth Workers may increase their contact with them, and thus leading to those who are eventually convicted of a new offense to have more contacts and attempts from Youth Workers. Second, CORI data only report the arraignment date, not the arrest date, and there is often a gap in time between these two dates. A Youth Worker who knows someone on their caseload was arrested may increase the rate of contacts with that individual in order to help them address the charges against them, leading to a higher rate of contacts for those individuals who are eventually convicted.

3.5.2 The Impact of COVID-19 on Roca participant Outcomes

COVID-19 has had an impact on Roca's programming, the economy, and the justice system. Yet because it represents such a small portion of our observation window, which began seven years ago in 2013, these impacts do not change our general findings for this particular evaluation. All univariate, bivariate, and multivariate analyses were re-run using a period that stops at March 15, 2020 in order to cease all activity prior to the start of COVID-19's impact on the United States. These analyses did not result in any substantive changes. In addition, we re-ran all multivariate models with a control variable that captures whether an individual was active at Roca during COVID-19; these tests resulted in few substantive changes. Specifically, some relationships in bivariate models became significant when the COVID-19

time period was excluded²⁴ and some relationships in multivariate models changed significance when either the COVID-19 time period was excluded or a COVID-19 indicator variable was include.²⁵

3.5.3 Roca Participant Outcomes – Survey Sample

We asked survey respondents a number of questions that allowed us to get a sense of their outcomes since starting with Roca. In addition to asking about past sustained employment and education (reported in section 3.3.4), we also asked respondents about current employment and education. Compared with 42% of respondents who were employed prior to engagement with Roca, 23% reported being currently employed. This discrepancy is likely due at least in part to job shortages resulting from the COVID-19 pandemic – 15% of respondents indicated that they lost a job due to the pandemic since starting at Roca, compared with 4% who said the same thing about their circumstances pre-Roca.

In terms of education programming outside of Roca, the proportion of Roca participants taking classes or training outside of Roca increased from 10% prior to Roca involvement to 17% at the time of survey administration. Of those taking classes or in training currently, 48% were in school, 44% were taking GED or HiSET prep, 2% were in vocational training, and 6% were doing something else. Two percent of respondents had stopped classes or training prior to coming to Roca, whereas 6% reported having to stop due to COVID-19 since coming to Roca.

Respondents also indicated whether, prior to engaging with Roca, they had been involved with or thought about a number of risky behaviors. Overall, 37% of respondents reported they had thought about doing something against the law, 47% said they had done something against the law, 58% said they used drugs or alcohol, 24% said they had done something as part of a gang, 44% had been violent, and 43% spent time with other people doing something against the law. There were no notable differences by site. People who got involved with Roca during COVID-19 were less likely ($p < .05$) to say they had done something against the law before involvement with Roca (24%) than those who got involved pre-COVID-19 (40%).

Respondents who answered yes to each of the statements about risky thoughts or behaviors were asked whether, since they have been involved with Roca, they thought about or engaged in those behaviors more often, less often, or about the same. Overall, respondents reported being much less likely to engage with these risky thoughts or behaviors since engaging with Roca (see Table 3.5-4). No notable differences were observed by site. Respondents who got involved with Roca during COVID-19 were less likely ($p < .05$) to state that they had done something as part of a gang since getting involved with Roca than before their engagement.

Table 3.5-4. Risky Behaviors Since Starting with Roca (Compared with Before Engaging with Roca)

Variable	More	Less	About the Same
<i>Thought about doing something against the law</i>	8.93%	89.29%	10.71%

²⁴ The relationships between the following variables went from not statistically significant to significant when the COVID-19 time period was excluded: the monthly rate of contacts and any public assistance, public medical assistance, assistance for disabilities, prior convictions, prior incarcerations, and prior weapons arraignments; the monthly rate of program attendance and other forms of public assistance and the number of prior arrests.

²⁵ Changes in significance occurred for the relationships between monthly contact rate and violent convictions, monthly program attendance rate and violent convictions, prior employment history and violent convictions, number of prior arrests and convictions, and unsubsidized employment and prior weapons assignments.

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<i>Done something against the law</i>	6.38%	84.40%	9.22%
<i>Used drugs or alcohol</i>	9.77%	63.22%	27.01%
<i>Done something as part of a gang</i>	12.68%	71.83%	15.49%
<i>Been violent</i>	7.52%	78.20%	14.29%
<i>Spent time with other people who were doing something against the law</i>	9.30%	76.74%	13.95%

We also asked respondents to report on different types of scenarios within which they have used Roca’s CBT skills to cope: 59% reported using CBT to cope with violence, 48% with job loss, 34% with educational setbacks, 61% with relationship problems, 18% with childcare issues, and 36% with the COVID-19 pandemic. Using CBT to cope with violence was significantly ($p < .05$) less common among respondents from Lynn than at other sites. There were no other differences by site, and no differences by eligibility date (pre- versus during COVID-19).

3.5.3.1 Accomplishments

Survey respondents also reported on what they have accomplished since starting at Roca. More than two thirds reported staying out of jail, while nearly 60% reported getting a job. Other common accomplishments included finding positive role models (42%), acting on their values (42%), learning to slow down and use a CBT skill (32%), taking programming classes (32%), and learning how to identify getting stuck in a think-feel-do cycle (29%). About a quarter also reported finishing job training or a permit class. As shown in Table 3.5-5, the following accomplishments varied significantly by site: finished a phase of the program ($p < .05$); finished job training ($p < .05$); finished a permit class ($p < .05$); obtained a permit ($p < .05$); found positive role models ($p < .05$); learned to identify a think-feel-do cycle ($p < .05$); learned how to slow down and use a skill ($p < .05$); and started acting on values ($p < .01$). Differences across sites are likely indicative of site variations in the programming they offer as well as opportunities available in the community. All accomplishments except for getting a GED or Hi-SET certification varied notably by eligibility date ($p < .01$ - $p < .05$): respondents who became eligible prior to COVID-19 were more likely to have indicated accomplishments than those who became eligible during COVID-19, likely a product of the amount of time encompassed in our data collection window and some of the set-backs to Roca’s operations due to the pandemic.

Table 3.5-5. Accomplishments by Site

Variable	Overall Percent	Boston Percent	Chelsea Percent	Holyoke Percent	Lynn Percent	Springfield Percent
<i>Finished a phase of the program</i>	24.67%	18.37%	31.25%	10.00%	34.69%	23.17%
<i>Got a job</i>	59.33%	71.43%	57.50%	52.50%	65.31%	53.66%
<i>Finished job training</i>	24.67%	18.37%	33.75%	22.50%	34.69%	14.63%
<i>Finished permit classes</i>	24.33%	24.49%	22.50%	15.00%	40.82%	20.73%
<i>Obtained permit</i>	19.00%	18.37%	20.00%	7.50%	34.69%	14.63%
<i>Finished educational classes</i>	8.67%	10.20%	8.75%	0.00%	14.29%	8.54%
<i>Completed TEP</i>	9.33%	6.12%	12.50%	0.00%	16.33%	8.54%
<i>Got a GED/Hi-SET</i>	8.00%	8.16%	15.00%	2.50%	8.16%	3.66%
<i>Took programming classes</i>	31.67%	24.49%	28.75%	30.00%	48.98%	29.27%
<i>Found positive role models</i>	42.33%	34.69%	45.00%	37.50%	61.22%	35.57%

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<i>Started thinking about how my thoughts influence my behaviors</i>	38.67%	40.82%	40.00%	32.50%	51.02%	31.71%
<i>Learned to identify when I get stuck spinning in a think-feel-do cycle</i>	28.67%	22.45%	33.75%	25.00%	44.90%	25.00%
<i>Learned how to slow myself down and use a skill to think or do something differently</i>	32.33%	24.49%	35.00%	27.50%	48.98%	26.83%
<i>Started acting on my values</i>	42.33%	30.61%	41.25%	32.50%	67.35%	40.24%
<i>Stayed out of jail</i>	65.00%	65.31%	70.00%	60.00%	69.39%	59.76%

3.5.3.2 Relationship between Risk Factors, Needs, Engagement, and Outcomes

We also conducted a number of multivariate regressions to explore the association between risk factors, needs, and engagement measures and outcomes. We first ran bivariate analyses, regressing the outcome on the predictor. We then added age at eligibility and race/ethnicity. Finally, we added site and eligibility date (pre- versus during COVID). We looked at employment, education, risky behaviors, and engagement with Roca.

Employment prior to Roca was positively associated with employment during engagement with Roca ($p < .01$), and associations held after controlling for age and race/ethnicity. This association was significant for both active sustained employment and for those who were employed but who lost their jobs due to COVID. We also regressed employment since coming to Roca on engagement (mandated, referred, walk-in, or other), using “walk-in” as the reference point. Compared with walk-ins, respondents who were referred to Roca were more likely to have lost a job due to COVID-19 ($p < .05$), though that association went away when covariates were added to the model. There were no other significant associations.

Taking classes or training outside of Roca after starting with Roca was also positively associated with taking classes prior to engagement with Roca ($p < .01$), and the association held after adding covariates. The association was significant for actively taking classes or training but not for stopping classes due to COVID.

In terms of risky behaviors, respondents were asked first if they had engaged in a number of risky behaviors or thoughts prior to engaging with Roca, and then those respondents who indicated they had engaged in that specific behavior were asked whether they engage in that behavior more, the same, or less than before Roca. We explored the association between engagement type and change in risky behaviors before and after engaging with Roca. We found that compared with walk-ins, respondents who were referred to Roca were more likely to indicate that they thought less about doing something illegal, but only when covariates were added. There were no other significant associations between engagement type and risky behaviors after engaging with Roca.

Finally, we regressed accomplishments (see list in Table 3.5-5) on engagement type. However, we did not observe any significant associations. However, there were no significant associations between engagement type and any of the accomplishments.

One potential explanation for the limited significant results is that the survey sample is quite small ($N=302$) compared with the administrative data. While exploring pre-post associations or associations between engagement and outcomes has the potential to provide some context to the administrative data, significant associations or lack thereof should not be considered indicative of a causal relationship (or lack thereof).

4. Discussion

4.1 Summary of Key Findings

4.1.1 Implementation of Roca's model at each site (RQ1)

The core elements of Roca's Intervention Model that frame our evaluation are relentless outreach, transformational relationships, stage-based programming, engaged institutions, and performance-based management. Within the time period of our evaluation, but after we conducted our observations, Roca shifted their framework to reflect the incorporation of CBT into the model. The new framework comprises four tenets within which the core elements are organized: creating safety and stability which incorporates *relentless outreach* and *transformational relationships*; teaching life-saving skills which incorporates the new trauma-informed *CBT* curriculum; practice skills, relapse, and repeat which incorporates *stage-based programming*; and engaged institutions and systems which incorporates *engaged institutions*. *Performance-based management* continues to be an underlying element of Roca's execution and monitoring of this framework.

Overall, three of the core components of Roca's model — relentless outreach, transformational relationships, stage-based programming — are embedded in the culture and front-line operations at each site. The engaged institutions component of Roca's model appears to be implemented primarily by site leadership and so our observations of this component were limited. When we did observe Youth Workers engaging with institutions outside of Roca, it was primarily in the service of referral and support for the young men on their caseload, rather than the critical work of systems change being executed by site leadership.

The factors that influenced variation across Roca sites included the physical Roca building, the communities and young men being served, site leadership, and staff availability for specialized programming (such as culinary). Commonalities across sites included the use of the red flag system for conducting relentless outreach, the presence of social activities for developing transformational relationships, and the teaching and practicing of material for developing employment, education, and life skills. Youth Worker style or preference and contextual issues of the community they are serving influenced how the core elements of Roca were implemented. Such variation demonstrates the flexibility of the model to fit the need to adapt to local contexts.

4.1.2 Characteristics of the participants that Roca serves (RQ2)

Our findings generally support Roca's focus on highest risk young men with greatest needs; however, there is variation in risks and needs by site:

- Young men from Boston and Lynn have more extensive and serious criminal histories than their counterparts from Chelsea, Springfield, and Holyoke.
- Young men at the Boston site are most likely to be Black or African American, while the young men at all other sites are most likely to be Hispanic/Latino.
- The rate of having a high school degree or GED is lowest in Holyoke.
- Young men in Lynn are more likely than young men in other sites to have had past employment, and young men in Holyoke more likely to have no recent employment history.
- There are more fathers or expectant fathers in Holyoke, Springfield, and Lynn.

While there is substantial variation in participant characteristics by site, the typical Roca participant is a young Hispanic/Latino man of 21 who has had six arrests, at least one felony charge, and prior convictions, incarcerations, and community supervision sentences. He is gang- and drug-involved and has

been arraigned for violent and weapons offenses. He has no employment history, no high school degree or equivalent, lives with his family, and requires various forms of public assistance.

Self-reported risks and needs collected through the participant survey generally correspond to those recorded in ETO, but there are some nuances. For example, survey results suggest that a larger percentage of young men had some sort of employment than is officially captured in the ETO data. One reason for this discrepancy could be that the wording of the survey question does not time-limit prior employment, so some respondents might have counted sustained employment from well before their engagement with Roca.

Understanding site variation in participant characteristics is crucial for understanding and reporting overall patterns in Roca's data since there may be factors that skew overall results.

4.1.3 Participant engagement and experiences with Roca (RQ3 & RQ4)

Overall, average monthly contacts are slightly less than the standards developed by Roca for Youth Workers, which may reflect the difficulty some Youth Workers have in reaching their young men on a consistent basis or it may be a result of the high caseloads we observed; young men in Boston generally participate in less programming and other Roca activities than young men at the other sites; and over half of all young men have no TEP enrollments. Consistent with our observations of site differences in TEP (see section 3.2.3.3 – Stage-based Programming), Boston had lower rates and numbers of TEP enrollments than the other sites.

A history of justice involvement has some relationship with engagement:

- Enrollment in TEP is lower among participants who have a drug offense history and monthly Youth Worker contacts are lower among individuals with a higher number of previous self-reported arrests.
- Program attendance is lower for individuals with a drug or weapons offense history.
- With the exception of violent and drug offenses, increases in any other type of criminal justice measure are linked to fewer days engaging with Roca.

Recent (within the past 6 months) or current employment is related to lower engagement. This finding may speak to lower-than-average levels of risks and needs among individuals who are or have been recently employed, and therefore have a lessened reliance on Roca programming to fulfill those needs.

On average, young men are continuously engaged with Roca (i.e., did not disengage for longer than 30 days) for approximately two years.

From a list of options for engaging with Roca, survey respondents selected that their Youth Worker and feeling safe at Roca are reasons they engage, although there is some variation in these findings by site. With respect to needs, respondents also said they engage with Roca because they need help with something employment-related, finding housing or shelter, and/or obtaining SNAP benefits, a service we only observed in Springfield.

The most common reasons young men indicated that they stopped engaging with Roca were that they got arrested or incarcerated. However, this self-reported finding does not necessarily mean they were dismissed from Roca because of those arrests or incarcerations.

Most survey respondents said they were very satisfied with Roca.

4.1.4 Roca participant employment and recidivism outcomes (RQ5)

Employment:

- Programming and Youth Worker contact are linked to increased odds of and reduced time to unsubsidized employment. Almost 40 percent of Roca participants have obtained unsubsidized employment. The rate of unsubsidized employment varies dramatically by site, with the lowest rates in Holyoke (17%) and the highest rates in Lynn (48%). These findings may reflect the high unemployment and poverty rates of Holyoke relative to the rest of the Commonwealth. Individuals in Boston have a much higher likelihood of employment than young men in other sites, a factor likely due to greater opportunity.

Recidivism:

- The rates of convictions and violent convictions are relatively consistent across sites, except for Holyoke, which has a low rate of both.
- TEP enrollment is associated with a lower likelihood of any new conviction and a violent new conviction. For example, participation in TEP reduces the odds of violent recidivism by 66%.
- Three-year recidivism rates among Roca participants are similar to or lower than statewide Massachusetts rates; however, these rates are not directly comparable and so should not be interpreted as indicative of Roca's impact.

Survey findings:

- Survey respondents indicated that prior to engaging with Roca, they had been involved with or thought about a number of risky behaviors (such as doing something against the law (37%), using drugs or alcohol (58%), socializing with people who were doing something against the law (43%)) and overall, respondents who reported such risky thoughts and behaviors reported being much less likely to engage with these risky thoughts or behaviors since engaging with Roca.
- From a list of options, respondents indicated having used Roca's CBT skills to cope with a variety of scenarios, including violence, job loss, educational setbacks, relationship problems, and the COVID-19 pandemic.
- Survey respondents also reported several accomplishments since starting at Roca, including staying out of jail, getting a job, finding positive role models, acting on their values, learning to slow down and use a CBT skill, taking programming classes, and learning how to identify getting stuck in a think-feel-do cycle. Differences in these findings across sites are likely indicative of the site variations we observed in the programming they offer as well as opportunities available in the community.

4.1.5 The impact of COVID-19

COVID-19 has impacted Roca's programming, the economy, and the justice system. Despite the disruption caused by the pandemic, its impact does not change our general findings for this evaluation because it represents such a small portion of the overall timeframe for this evaluation.

4.2 Limitations

Per our contractual agreement with Roca, this evaluation did not include participants in the Baltimore, Maryland site, or participants in the young mothers program. Such exclusions limit our ability to speak to Roca's intervention model beyond its model for young men in Massachusetts.

Our evaluation included some limitations in our data collection methods. Our observation of engaged institutions was limited as this element of Roca’s model seems to be primarily implemented by site leadership, rather than the front-line staff (Youth Workers) who we shadowed. As such, we were limited in our assessment of that component of Roca’s model. The same limitation is true for the performance management component of Roca’s model. Limitations related to the participant survey include response bias (a limitation common to surveys of hard-to-reach populations), which restricts our ability to generalize the survey findings to Roca participants in general. We also did not conduct our observations through the lens of Roca’s new framework and so are limited in what we are able to say regarding the shift in framing. Finally, there are limitations with our analyses of program data. First, our findings are dependent on what is record in ETO and CORI; missing data on risk factors, measures of engagement, or criminal activity that does not result in arraignment all impact the conclusions we are able to draw about Roca. Also, while many bivariate and multivariate relationships were explored, these were all correlational, not causal. Rigorous experimental or quasi-experimental design are required for causal inference, and thus and relationships described in this report can only speak to a correlation between two factors not whether that correlation is causal in nature.

It is also worth noting that although this evaluation was not directly impacted by the COVID-19 pandemic, interviews with site directors and some of the survey findings indicate that the impact on Roca’s operations and participants was significant and could have implications for the generalizability of the findings we report from this evaluation moving forward.

4.3 Recommendations and Future Directions

- Given the findings on the impact of a history of drug offenses, we recommend Roca consider ways to incorporate drug treatment into their programming, in addition to mental health counseling opportunities that are already offered.
- Literature suggests that individuals who engage in high levels of violent crime are often themselves victims of crime. Therefore, we also recommend that Roca incorporate regular screening for experiences of trauma and clinical treatment for trauma, given the high levels of justice involvement and violent criminal histories of their participants.
- The strength of evaluations of Roca relies heavily on the strength of the data gathered by Roca. Issues that may limit evaluations as well as regular internal assessments are the validity, reliability, and missingness of data as well as ensuring that data are being collected on the most salient factors. As an organization that is driven by evidence and data, future work should evaluate potential problems with Roca’s data and provide solutions that can improve staff collection and use of data, as well as the organizations understanding of what it does, whether it works, and why it works.
- We recommend that Roca study the impact of Roca’s model on other outcomes, such as changes in readiness captured in regularly administered change assessments, or changes in types of offending. Such a study would also benefit from an accompanying qualitative study focused on the Roca participant perspective.
- We also recommend that Roca consider conducting evaluations to further unpack and explore some of this study’s findings, such as the correlation of programming and Youth Worker contact with increased odds and reduced time to unsubsidized employment, and the association of TEP enrollment with reductions in the likelihood of any new conviction and a violent new conviction.
- Given our limitations, we recommend evaluating the long-term impacts of the COVID-19 pandemic on Roca’s operations and participants, an evaluation of the young mothers program, and an evaluation of Roca’s model that includes the Baltimore site.

Appendix A. Data Collection Protocols

A.1 Observation Protocol

Site Visited: _____

Date of Visit: _____

Program Observed (Life Skills, Educational, Vocational, etc.): _____

Programming Questions (and probes)

- When is the activity taking place?
 - Time of day, day of week, duration
 - Regularly scheduled activity vs. one-time event?

- What is happening during the programming/activity?
 - Who is leading the activity?
 - Who is participating? (number of participants, stage of programming)
 - Are there other things going on at the same time as the activity?
 - How engaged are the participants?
 - What materials are being used?

- What appears to be the point of the activity?
 - Does it seem to help participants build appropriate skills (e.g., life/educational/vocational/etc.)?
 - What skills are participants working on?

- How are staff facilitating the activity?
 - Any particular strategies?
 - Types of interaction (mostly one-on-one or group?)

General Questions (and probes)

- How is the space different from other sites? Has it been designed or adapted in any way to accommodate the site-specific population?

- Who is present, and what are they doing?
 - Staff-to-youth ratio?
 - Do participants seem to be part of the target population (young men 17-24 who have been involved in the criminal justice system, may be involved with gangs or drugs, have dropped out or are at risk of dropping out of school, and have no history of stable employment)?

- How are people interacting?
 - How do staff and participants interact with one another? With their peers (i.e., staff with staff, youth with youth)?
 - Do participants seem to be engaged in the programming?
 - Are there any signs of transformational relationships in action?

Questions for Staff (and probes)

Intake/Change Assessment Questions for Staff

- What does the intake process look like?
 - Same for everyone? Is it more of a conversation or do they just go through the form together?

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- How is program eligibility determined? Is the eligibility and enrollment packet used?
- Can you describe how you use the change assessment?
 - Does everyone get an assessment?
 - When do they get the initial change assessment? At intake or later? How often do you administer it?
 - What obstacles do you have to administering it?
 - How do you use the information you get out of the assessment? For what types of decisions?
- Is there any discussion at intake of a service plan?
 - Does it seem like a standardized process?
 - How quickly are participants set up with programming?

Programming Questions for Staff

- Who typically attends this class/programming?
- How are participants recruited for classes/programs?
- What happens if a youth doesn't attend?
- How often does this class/program meet?
- What is the curriculum and how long is it?
- What resources do you have to deliver the programming?
 - Is there anything that you don't have but that you need for this program?

Collect any curriculum materials/resources they may have about the class.

Staff Experience

- What is training for the job like?
 - Is there an orientation?
 - Ongoing training?
 - What kind of training do you get specific to the program you're delivering?
 - Manual for Roca staff? For specific programs?
 - If training/orientation, how helpful was it?
 - Is there additional training that you feel like you need?
- Do you do any administrative work?
 - Development/fundraising?
 - Partner meetings/referrals?
 - Other?

Takeaways/Post-Observation

- Main takeaways from today's observation?
- Are the programming components delivered with fidelity; that is, does the execution of the individual program components match what was planned?
- Do Roca staff have resources to address clients' needs? Are youth presenting with needs that align with Roca's model?
- What elements of the Roca model can be modified to accommodate local needs or challenges in the scaling up process? What elements of the model are critical and must remain unchanged?
- What were the main implementation challenges in each Roca site and how did Roca address them?

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A.2 Ride-Along Protocol

Field Ride Date:

Suggested Preparation Questions for Youth Worker	Notes
What do you do to prepare for their outreach with youth? What is their method or process for preparing for outreach?	
How often do you do these?	
What does a typical ride-along look like? Are youth informed of the meeting in advance?	
How many youth are you targeting for outreach today? What is the purpose of your outreach with the youth you are targeting today? (Try to get at whether they've tried to engage them before but haven't been able to, first outreach effort, follow-up outreach, youth not showing up suddenly, etc.)	
What do you hope to accomplish with the youth you are targeting for outreach today.	
How many youth are on your caseload? How many have you been able to engage with?	

Execution of Outreach	Notes
What did the outreach consist of?	
Describe youth worker's demeanor throughout the day (E.g., were they calm, did they get upset, were they uncomfortable at any point, etc.; It may vary depending on the client they are providing outreach to, etc.)	
How often do you conduct outreach?	

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Facilitation of Outreach	Notes
How many youth did they target? How many were they able to find? How many were they able to engage with?	
Did the youth engage in the discussion? What was the tone of the discussion?	
Describe the body language of the youth and youth worker (e.g., infer a friendly and relaxed conversation).	
Describe whether the full outreach was completed, or if it was interrupted or dismissed.	
Approximately, how long did the outreach last (for each youth and how long they were out in the field in total)?	

During/Post Ride-Along Questions for Youth Worker	Notes
Is this a typical “outreach” day for you?	
Would you consider this a successful day? Why or why not? How do you define success? (probe: meaningful conversation as well as engaging youth in Roca)	
What would you say your ‘success’ rate is? (make sure you understand how they define success)	
How many youth do you target at a given time? In a given day?	
How do you identify youth for outreach?	

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How do you usually start a conversation once a youth has been identified and approached?	
Do you always know the youth before starting a conversation? What is your strategy/approach to engage youth in a conversation with you?	
Will you approach someone not on the target list, e.g., someone who is already on your caseload?	
When do you let the youth know (if they don't already) that they are being identified as part of Roca's target population?	
How many attempts do you make? How often (e.g., attempt to reach out to a youth once a day, once a week, etc.)?	
Do the youth ever enter the car? Do they ever go back to Roca with you?	
Do you ever enter the residence of the youth?	
Does the protocol differ when entering the residence of a youth? How so?	
What's the protocol for if things become violent/dangerous?	
Have things ever progressed to an unsafe environment for you or the youth?	
Do you ever interact with youth's family or friends? What kinds of strategies do you use for those interactions? What is the benefit of the interactions?	
What do you do if you see illegal activity during outreach?	

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Are there factors that influence your approach to outreach? What might cause you to approach your outreach it differently? (e.g., How does the outreach differ for different youth, by season/weather, etc.?)	
Are there any materials that are distributed? Ex: posters, flyers, business cards etc. (If so, ask for copies of any generic materials, nothing with PII)	
Do you think the Roca program is making a difference?	

Field Ride Notes:

Question for youth worker: To what extent they think the presence of Abt observers may have affected their or the youth’s behavior?

Question for observer: To what extent you think your presence may have affected the outreach worker behavior?

Other:

A.3 Roca Participant Survey

Please enter the ID: _____
(Echo back the number for confirmation.)

S1. Are your initials: *[DISPLAY: INITIALS]*?
 Yes (*Continue*)
 No (*exit & go to screen out message*)

Screen out message : The information you have provided does not match our records. If you think you entered something incorrectly, please re-enter the survey link and try again. If you think our records are incorrect, please contact your counselor."

S2. Please enter your date of birth.
 _____ (*Mask to match sample format*)

S3. To ensure you entered it correctly, please enter your date of birth again.
 _____ (*Mask to match sample format*)

If S3 does not match S2, ask S2 again.
(PROGRAMMER: If DOB matches sample, continue.
If DOB does not match sample, exit and go to screen out message.)

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Screen out message : The information you have provided does not match our records. If you think you entered something incorrectly, please re-enter the survey link and try again. If you think our records are incorrect, please contact your counselor."

(PROGRAMMER: ALLOW R to skip a question without a response. Provide 1 error message and then continue without a response.)
(If a question is skipped, auto mark that question to REFUSED.)

Welcome to the Roca Youth Survey.

What is this about?

Roca asked us to study Roca's programming. We work at a company called Abt Associates. People at Abt study lots of different topics, like employment, education, and criminal justice. For the Roca study, we would like to learn about the young men who get programming from Roca. We would like to know about how you got connected to Roca, what you do there, and what you like and do not like about Roca.

What am I being asked to do?

We would like you to answer questions in a survey about your experience with Roca. If you decide to take the survey, you will get a \$20 gift card. We hope that you will take this survey. Your answers could help make Roca's programming better. But, you do not have to take the survey if you do not want to. You can stop answering questions at any time and you do not have to answer any questions that you do not want to answer. Taking the survey – or not taking the survey – will not change your relationship with Roca in any way.

What will you do with my answers?

Abt will combine everyone's answers to the questions and write a report to Roca. We will link your responses with Roca's data and criminal justice data. We will not tell Roca what you say; we will only tell them a combination of what everyone says. Only the Abt study team will see your answers, and we will not share them with anyone else. The only reason we would ever need to share your answers is if you say you are going to hurt yourself or someone else – but we will not ask you about this. We will not tell Roca anything about you or your answers.

Will there be any risk to me if I take the survey?

We do not think there will be any risk to you if you take the survey. There is a small chance that your answers could get lost or stolen. We will do everything we can to prevent this from happening.

Who can I call with questions?

If you have any questions, you can send an email to the Project Director, Holly Swan, at Holly_Swan@abtassoc.com. If you have questions about your rights as a participant, you can call Abt's Institutional Review Board (IRB) at 1-877-520-6835 or send them an email at IRB@abtassoc.com. All contact with the IRB will be private.

Do you want to take the survey?

- Yes
- No (**TERMINATE INTERVIEW – REFUSED CONSENT**)

(PROGRAMMER: NEW SCREEN)

Before you begin, a few important reminders:

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- To move through the survey, please use the next and back buttons in the survey, not the forward or back button on the browser.
- If you can't finish the survey, your place in the survey will be saved if you close the page. When you are ready to return, please click on the link contained in the email or go to www.abtsurvey.com/roca and enter your ID number again. When you start again, you will be able to continue where you left off.
- If you do not want to answer a question, simply hit the next button and the survey will continue.

Let's begin.

A. Which Roca site does your Youth Worker work out of?

- Lynn
- Boston
- Chelsea
- Springfield
- Holyoke
- Baltimore

(ASK ALL)

1. How long has it been since you met your first Youth Worker?
 - I just met them this week
 - I met them a week or two ago
 - I met them about a month ago
 - I met them more than a month ago, but it's been less than a year
 - I met them about a year ago
 - It's been a couple years since I met them

(ASK ALL)

2a. How did you first get started with Roca? (SINGLE SELECT)

- A judge mandated it (**SKIP TO Q2B**)
- I was referred to Roca (*ask 2a1*)
- A Youth Worker approached me (**SKIP TO Q2B**)
- I walked in on my own (*ask 2a2*)
- Another way (how?): _____ (**SKIP TO Q2B**)

(ASK 2A1 and 2A1A if 2A=2)

2a1. Who referred you to Roca?

- My probation or parole officer
- My friend
- My girlfriend/partner/wife
- Someone from my family (mom, brother, aunt, cousin)
- A Roca Youth Worker
- My counselor or social worker
- Someone else (who?) _____

2a1a. Why do you think you were referred to Roca? (*Check all that apply*)

- I needed help finding a job, doing a resume or looking for job training programs
- I had friends at Roca
- I needed legal help

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- I needed counseling
- I needed shelter or housing
- I needed clothing or food
- I needed a safe place to hang out
- I needed help with a court case
- I needed services for my kids

I needed help with:

- TANF (welfare)
- SNAP (food stamps)
- Medicaid
- Filing for unemployment
- Other (please specify): _____
- I needed something else (please specify): _____
- I don't know

CATI NOTE: IF ENROLLMENT DATE IS MARCH 15TH OR AFTER THAT DATE, GO TO 2a1a1. If enrollment date is before March 15th, then skip to 2a2 logic.

2a1a1. Which, if any, of these did you need assistance with because of COVID-19 pandemic?

- I needed help finding a job, doing a resume or looking for job training programs
- I had friends at Roca
- I needed legal help
- I needed counseling
- I needed shelter or housing
- I needed clothing or food
- I needed a safe place to hang out
- I needed help with a court case
- I needed services for my kids
- I needed help with:
- TANF (welfare)
- SNAP (food stamps)
- Medicaid
- Filing for unemployment
- Other (specify) _____
- I needed something else (please specify) _____
- I don't know
- None of these

GOTO Q2B

(ASK 2A2 if 2A=4)

2a2. Why did you decide to walk in on your own? *(Check all that apply)*

- I needed help finding a job, doing a resume or looking for job training programs
- I had friends at Roca
- I needed legal help
- I needed counseling
- I needed shelter or housing
- I needed clothing or food
- I needed a safe place to hang out
- I needed help with a court case
- I needed services for my kids

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- I needed help with:
- TANF (welfare)
- SNAP (food stamps)
- Medicaid
- Filing for unemployment
- Other (specify)_____
- I wanted to talk to someone ^[]_{SEP}
- I needed something else (please specify)_____
- I don't know

CATI NOTE: IF ENROLLMENT DATE IS MARCH 15TH OR AFTER THAT DATE, GO TO 2a2a. If enrollment date is before March 15th, then skip to 2b.

2a2a. Which, if any, of these did you need assistance with because of COVID-19 pandemic?

- I needed help finding a job, doing a resume or looking for job training programs
- I had friends at Roca
- I needed legal help
- I needed counseling
- I needed shelter or housing
- I needed clothing or food
- I needed a safe place to hang out
- I needed help with a court case
- I needed services for my kids
- I needed help with:
- TANF (welfare)
- SNAP (food stamps)
- Medicaid
- Filing for unemployment
- Other (specify)_____
- I wanted to talk to someone ^[]_{SEP}
- I needed something else (please specify)_____
- I don't know
- None of the these

(ASK ALL)

2b. Why do you engage with Roca **now**? (Check all that apply)

- I trust my Youth Worker
- I feel safe with Roca
- My Youth Worker keeps me engaged
- I need help finding a job, doing a resume or looking for job training programs
- I have friends at Roca
- I have to come to Roca because a judge, DA, or probation officer says I have to
- I need clothing or food
- I want to talk to someone ^[]_{SEP}
- I want counseling
- I want help finding housing or shelter
- I need help with a court case

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- I want services for my kids

I need help with:

- TANF (welfare)
- SNAP (food stamps)
- Medicaid
- Housing
- Filing for unemployment
- Other (please specify): _____
- I want something else (please specify): _____

CATI: If 2b = “I trust my Youth Worker”, “I feel safe with Roca”, and/or “My Youth Worker keeps me engaged” and not any other options, then skip to Q3.

2b1. Which, of any, of these do you need assistance with **now** because of COVID-19 pandemic?
(Check all that apply – display only those selected in 2b)

- I need help finding a job, doing a resume or looking for job training programs
- I have friends at Roca
- I have to come to Roca because a judge, DA, or probation officer says I have to
- I need clothing or food
- I want to talk to someone ^[]_[]
- I want counseling
- I want help finding housing or shelter
- I need help with a court case
- I want services for my kids
- I needed help with:
- TANF (welfare)
- SNAP (food stamps)
- Medicaid
- Housing
- Filing for unemployment
- Other (specify)_____
- I wanted something else (please specify)_____
- None of these

(ASK ALL)

3. Since you first met your Youth Worker, have you ever stopped engaging with Roca?

- Yes (*ask 3a*)
- No (*skip to 4a*)

(ASK 3A if 3=1)

3a. Why have you stopped engaging with Roca? (*Check all that apply*)

- I got arrested
- I got incarcerated
- I got annoyed with my Youth Worker
- I did not like Roca
- I moved to a different town
- I had issues with another Roca participant
- I was in treatment

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- I was using alcohol or drugs
- I had a medical issue
- I did not feel safe at Roca
- I did not like some changes they made in response to COVID-19
- Other (please specify): _____

(ASK ALL)

4a. What kinds of things have you EVER done with Roca? (<i>Check all that apply</i>)
<input type="checkbox"/> Vocational classes (e.g., woodshop, OSHA, Forklift)
<input type="checkbox"/> Work Crew/Transitional Employment Programming (TEP)
<input type="checkbox"/> Educational programming: Hi-SET/GED
<input type="checkbox"/> Educational programming: Other (please specify): _____
<input type="checkbox"/> Healthy Habits/substance use class
<input type="checkbox"/> Work Force Readiness (WFR) class
<input type="checkbox"/> Cognitive behavioral theory (CBT)
<input type="checkbox"/> Core Circle
<input type="checkbox"/> Community Dinner
<input type="checkbox"/> Counseling
<input type="checkbox"/> Culinary
<input type="checkbox"/> Art class
<input type="checkbox"/> Studio
<input type="checkbox"/> Exercise/work out/play sports
<input type="checkbox"/> Help getting housing
<input type="checkbox"/> Help getting a job (e.g., resume help, mock interviews)
<input type="checkbox"/> Help getting benefits (e.g., SNAP/food stamps, TANF/welfare)
<input type="checkbox"/> Help getting permit/license
<input type="checkbox"/> Meet with Youth Worker
<input type="checkbox"/> Ate a meal
<input type="checkbox"/> Just hang out
<input type="checkbox"/> Other (please specify): _____

Satisfaction with Roca

(ASK ALL)

5. Overall, how helpful is Roca to you?
- Very helpful
 - Somewhat helpful
 - Not very helpful
 - Not at all helpful

(ASK ALL)

5a. In a few words, please give reasons why you think Roca is (ANSWER TO Q5).

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(ASK ALL)

6. Please say how much you agree with each sentence about Roca, on a scale from 1 to 5, where 1=strongly disagree, 3 = neither agree nor disagree, 5 = strongly agree, and N/A means this statement doesn't apply to you.

	<i>Choose your rating below. (1= strongly disagree 5=strongly agree)</i>					
My Youth Worker explains everything to me in a way that is easy to understand.	1	2	3	4	5	N/A
My Youth Worker listens carefully to me.	1	2	3	4	5	N/A
My Youth Worker and the other Roca staff work well together to address my needs.	1	2	3	4	5	N/A
My Youth Worker gives me information and resources that help me make safe choices.	1	2	3	4	5	N/A
My Youth Worker spends enough time with me.	1	2	3	4	5	N/A
I have a strong and trustworthy relationship with my Youth Worker.	1	2	3	4	5	N/A
My Youth Worker treats me with respect when we're at Roca.	1	2	3	4	5	N/A
My Youth Worker treats me with respect when we're in my neighborhood or at my house.	1	2	3	4	5	N/A
Other Roca staff (e.g., directors, crew supervisor, educator) treats me with respect.	1	2	3	4	5	N/A
Before COVID-19, I felt safe at the Roca building.	1	2	3	4	5	N/A
I feel safe with my Youth Worker.	1	2	3	4	5	N/A
I feel safe with other Roca staff.	1	2	3	4	5	N/A
Roca did a good job responding to the COVID-19 pandemic	1	2	3	4	5	N/A

(ASK ALL)

7. How could Roca be better? *This could include suggestions to improve the services available, how Roca runs, how you are treated, how Roca responded to the COVID-19 pandemic, or anything else that comes to mind.*

This part of the survey asks about Cognitive Behavioral Theory (CBT) at Roca.

Roca uses CBT to help you with your thoughts, feelings, and behaviors. CBT is also meant to help you think about how your thoughts, feelings, and behaviors affect each other.

(ASK ALL)

8. Do you know about Roca's CBT skills?

- Yes (*ask 8a*)
- No (*skip to 13a*)
- Not sure (*skip to 13a*)

(ASK 8a if 8=1)

APPENDIX A: DATA COLLECTION PROTOCOLS

8a. Have you ever done CBT with Roca? *(Check all that apply)*

- Yes, I've had a class with a worksheet
- Yes, my Youth Worker talked to me about skills to use in different situations
- Yes, my Youth Worker used key cards with me
- No
- Not sure

(ASK 9 if 8=1)

9. How much do you like the CBT skills that you have learned about, on a scale from 1 to 5, where 1= I didn't like it at all, 3 = neither liked nor disliked, and 5 = I liked it a lot.

<i>Choose your rating below. (1= didn't like it at all 5=liked it a lot)</i>						
Be Present	1	2	3	4	5	I have not learned about this skill
Label Your Feelings	1	2	3	4	5	I have not learned about this skill
Move It	1	2	3	4	5	I have not learned about this skill
Act On Your Values	1	2	3	4	5	I have not learned about this skill
Stick With It	1	2	3	4	5	I have not learned about this skill
Flex Your Thinking	1	2	3	4	5	I have not learned about this skill
Solve It	1	2	3	4	5	I have not learned about this skill

(ASK 10 if 8=1)

10. Does your Youth Worker talk about CBT or CBT Skills with you?

- Yes *(ask 10a)*
- No *(skip to 11)*
- Not sure *(skip to 11)*

(ASK 10a and 10b if 10=1)

10a. About how often does your Youth Worker talk about CBT or CBT Skills with you?

- More than once a week
- Around once a week
- Around once a month
- Less than once a month

10b. Which skills has your Youth Worker talked to you about? *(Check all that apply)*

- Be Present
- Label Your Feelings
- Move It
- Act On Your Values

APPENDIX A: DATA COLLECTION PROTOCOLS

- Stick With It
- Flex Your Thinking
- Solve It

(ASK 11 if 8=1)

11. Do you feel ready to use the skills in your daily life?

- Yes (**SKIP TO 12**)
- No (**ask 11a**)
- Not sure (**ask 11a**)

(ASK 11a if 11=2 or 3)

11a. Do you think you need more practice using the skills?

- Yes
- No
- Not sure

(ASK 12 if 8=1)

12. Have you tried using CBT Skills in your life outside Roca?

- Yes (**ask 12a-12d**)
- No (**ask 13a**)
- Not sure (**ask 13a**)

(ASK 12a-12d if 12=1)

12a. Which CBT Skills have you tried using in your daily life outside of Roca? (*Check all that apply*)

- Be Present
- Label Your Feelings
- Move It
- Act On Your Values
- Stick With It
- Flex Your Thinking
- Solve It

(IF Q12A = only 1 response, automark Q12B with that response and continue)

12b. Which skill have you used most often? (SINGLE RESPONSE)

- Be Present
- Label Your Feelings
- Move It
- Act On Your Values
- Stick With It
- Flex Your Thinking
- Solve It

12b1. Why do you use this skill the most?

- It's easier to understand than the others
- It's easier to use in more situations
- I can relate to it more than the others
- I've had more practice with it than the others
- Other (please specify): _____

12c. How helpful are the CBT Skills for dealing with situations in your life?

- Very helpful
- Kind of helpful
- Not helpful, but not unhelpful
- Not very helpful
- Very unhelpful

12d. What kinds of situations do you use the CBT skills to cope with? (Check all that apply)

- Violence

APPENDIX A: DATA COLLECTION PROTOCOLS

- Job loss
- Educational setbacks
- Relationship problems
- Childcare issues
- The COVID-19 pandemic
- Other (please specify): _____
- None of these

(ASK ALL)

The remaining questions ask about how well Roca is working for you.

13a. In the past, have you ever: **(for all “Yes” answers at 13a, ask corresponding Q13b)**

	Yes	No
13a1. Thought about doing something against the law:	<input type="radio"/>	<input type="radio"/>
13a2. Done something against the law:	<input type="radio"/>	<input type="radio"/>
13a3. Used drugs or alcohol:	<input type="radio"/>	<input type="radio"/>
13a4. Done something as part of a gang:	<input type="radio"/>	<input type="radio"/>
13a5. Been violent:	<input type="radio"/>	<input type="radio"/>
13a6. Spent time with other people who were doing something against the law:	<input type="radio"/>	<input type="radio"/>

(ASK 13b for each yes at 13a)

13b. Since you’ve been involved with Roca, would you say you have:

	More often	Less often	Stayed the same
13b1. Thought about doing something against the law:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13b2. Done something against the law:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13b3. Used drugs or alcohol:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13b4. Done something as part of a gang:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13b5. Been violent:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13b6. Spent time with other people who were doing something against the law:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(ASK ALL)

14. What are some of the things you’ve done since you started with Roca? *(Check all that apply)*

- Finished a phase of the program
- Got a job
- Finished job training (e.g., Fork lift operating license; OSHA certification; Got ServSafe certified)
- Finished permit classes
- Obtained permit
- Finished educational classes
- Completed TEP
- Got a GED/Hi-SET
- Took programming classes (e.g., Workforce Readiness, CBT, Healthy Habits)
- Found positive role models and friends
- Started thinking about how my thoughts and feelings influence my behaviors
- Learned to identify when I get stuck spinning in a think- feel- do cycle
- Learned how to slow myself down and use a skill to think or do something different
- Started acting on my values
- Stayed out of jail
- None of these
- Other (please specify): _____

(ASK ALL)

15. Before coming to Roca, did you have a job for longer than three months?

APPENDIX A: DATA COLLECTION PROTOCOLS

- Yes (*ASK 15a1*)
- No (*SKIP TO 15a*)
- I had a job before but lost it because of the COVID-19 pandemic (*ASK 15a1*)

(*ASK 15a1 if 15=1 or 3*)

15a1. What was your job? _____

(*ASK ALL*)

15a. Right now, do you have a job that you've been in for longer than three months?

- Yes (*ASK 15b*)
- No (*SKIP TO 16*)
- I had a job before but lost it because of the COVID-19 pandemic (*ASK 15b*)

(*ASK 15b if 15a=1 or 3*)

15b. What is your job? _____

(*ASK ALL*)

16. Before coming to Roca, were you taking classes or other training somewhere else?

- Yes (*ASK 16a*)
- No (*SKIP TO 17*)
- I was taking classes or training before coming to Roca but had to stop because of the COVID-19 pandemic (*ASK 16a*)

(*ASK 16a if 16=1 or 3*)

16a. What school or program? _____

(*ASK ALL*)

17. Are you taking classes or other training somewhere other than Roca right now?

- Yes, in school
- Yes, GED/Hi-SET prep
- Yes, vocational training (please specify): _____
- Yes, other (please specify): _____
- I was, but I had to stop because of the COVID-19 pandemic
- No

(*ASK ALL*)

18. In addition to the help you get from Roca, in the past year have you gotten help from any of these agencies or people? (*Check all that apply*)

- A probation officer
- A parole officer
- A caseworker or social worker
- A substance abuse treatment clinic
 - A behavioral health clinic
 - A therapist or counselor
- Other (please specify): _____
- None of these

Thank you for taking the time to answer this survey. We will let your Youth Worker know that you completed the survey and they will contact you about getting your gift card within the next 7 days.

Appendix B. Codebook

Name	Description
COVID-19	Things that stand out that might be relevant to COVID-19 related model changes
Educational Programming	Observed indicator of Roca's educational programming such as HiSET
I_Circle	Observed program circle including crisis circle and core circle
I_Employment	Observations related to employment
Work Crew (TEP)	Observations related to work crew programming (also called TEP)
Influence of Observers	Abt team influence on site observations
Leadership	Observations related to Roca Leadership (Director, Assistant Director, etc.) perceptions of the Roca program
Life Skills Programming	Observed indicator of Roca's life skills programming
Anger Management	Observed indicator of Roca's anger management programming
CBT	Observed indicator of Roca's CBT programming
I_Staff Training	Observed indicator of staff training as it relates to CBT programming
Counseling	Observed indicator of counseling at Roca
I_Drivers Permit	Observed indicator of Roca's support in youth obtaining their drivers permit
I_Substance Use	Observed indicator of Roca's substance use programming
Parenting Skills	Observed indicator of Roca's parenting programming
Location	Location observation took place
Car	Observation took place in the car
Classroom at Roca	Observation took place in a classroom at Roca

Name	Description
Office Space at Roca	Observation took place in an office space at Roca
Open Space at Roca	Observation took place in an open space at the Roca building
Outdoor Public Space	Observation took place in an outdoor public space such as on the street, at a street corner, or at the park
Place of Youth Employment	Observation took place at youths place of employment
Public or Community Building	Observation took place in a public or community building such as library, fast food restaurant, etc.
Residence	Observation took place at a residence including porch, lawn, and driveway
Roca Model	Mentions of Roca's model
Engaged Institutions	Observed indicator of Roca engaging with other institutions
Relentless Outreach	Observed indicator of Roca's relentless outreach
Staff Coordination	Observed indicator of coordination among Roca staff
Transformational Relationships	Observed indicator of importance of establishing trust and rapport when engaging in the Roca program
Site-level Factors	Observed indicator of factors that influence each site differently
Building Space	Observed indicator of the impact of building space on the operations of the Roca program
Community Influence	Observed indicator of contextual factor of the community outside Roca's control that influences how Roca operates at a site
Staff Burnout	Observed indicator of staff burnout at site
Staff Shortage	Observed indicator of staff turnover or shortage of staff
Technology	Observed indicator of the impact of technology on the operations of the Roca program

Name	Description
Social Activity	Observed indicator of social activity as it relates to fostering a relationship at Roca
Award Ceremony	Observation took place at the award ceremony held by Roca or the award ceremony was discussed during the observation
Community Dinner	Observation took place at community dinner held by Roca or community dinner was discussed during observation
Development Day Activity	Observation took place during development day activity
Gym	Observed indicator of the use of the gym at Roca
Studio	Observed indicator of the use of the studio at Roca
Staff-level Factors	Observations related to Roca staff members (Youth Worker, Educator, etc.) perceptions and implementation of the Roca program
Buy-in	Staffs acceptance and support of the Roca program
I_Case load	Youth Workers case load discussed at the time of the observation
I_Competence	Observed indicator of whether staff is competent in teaching the observed programming
I_Family and friends relationships	Observed indicator of staff relationship with youth's family or friends including mentions of youth's family or friends during observation
Safety Concerns	Indicator of Staff safety concerns when interacting with the youth
Satisfaction	Staffs satisfaction with the Roca program
Youth Behavior Management	Observed indicator of staff ability to manage youth behavior
Vocational Programming	Observed indicator of Roca's vocational programming
Culinary	Observed Indicator of Roca's culinary programming

Name	Description
Workforce Readiness Programming	Observed indicator of Roca's workforce readiness programming
Youth-level Factors	Observations related to Roca participants (youth) perceptions of and engagement in the Roca program
Buy-in	Observed whether youth accept and are supportive of the Roca program
Engaged	Observed indicator of whether youth are engaged when participating in the Roca program
Findable	Indication of Roca staff's ability to find or make contact with youth
Positive Attitude	Observed whether youth have a positive attitude towards the Roca program
Safety Concerns	Youth safety concerns as it relates to engaging with Roca
Satisfaction	Youth satisfaction with the Roca program