Expanding SUD and Co-occurring Mental Health Services for the Orange County Young Adult Court

Local Evaluation Plan (Level Two)

Grantees: Regents of the University of California dba University of California, Irvine (1327-24)

<u>LEP Authors</u>: Elizabeth Cauffman, PhD, Marie Gillespie, PhD, Jordan Beardslee, PhD, Dannah Elhaj, MA, Tami Di Paolo, M.Ed., & Josh Meyers

Contact Information:

Project Director: Dr. Cauffman, Cauffman@uci.edu, 949-233-6298

Day-to-day program contact: Dr. Gillespie, Marie.Gillespie@uci.edu, 949-524-7043

Project Time Period: 10/01/2024-06/30/2028

Contract Executed: 03/10/2025

Funding Source: Proposition 47 grant program, the Board of State and Community Corrections

Project Background

The Orange County Young Adult Court (OC-YAC) employs best practices in developmental science to form individualized treatment plans for justice-involved young adult males with the goal of improving their life trajectories. This program addresses several challenges that justice-involved young adults face when navigating through the legal system. Transitional-aged-youth (TAY; ages 18 – 25) are disproportionately represented in the criminal justice system and exhibit the highest rate of recidivism compared to older adults. TAY also have innate disadvantages, as brain development of key self-control processes continues throughout the mid-20s. As young adults are not yet fully able to inhibit impulses, plan for the future, resist peer influence, and are at their highest peak of sensation-seeking and risk-taking, it would follow that this group is vulnerable to myriad detrimental trajectories, including justice system involvement. Moreover, for TAY who are charged with a felony as a result of this risk-taking behavior, lifetime consequences can impact the very factors associated with crime desistance (e.g., unable to secure stable employment as a result of having to check the felony box on applications). As a means to address the gap between developmental science and young adult legal practices in the US, as well as the challenges justice-involved TAY experience, the research team at the University of California, Irvine (UCI) partnered with the Superior Court of California in Orange County and community partners (e.g., Orangewood Foundation), initiated the Young Adult Court Study – a randomized controlled trial (RCT) of a specialized collaborative court designed for TAY who have committed their first felony offense. The OC-YAC (heretofore identified as "YAC") aims to hold TAY accountable in a science-driven, developmentally appropriate manner that will reduce recidivism and promote positive long-term outcomes. Those who successfully complete YAC programming are eligible to have their felonies dismissed by the court, thereby clearing their path that would otherwise be barred due to a record with a felony conviction.

Current YAC procedures comprise four steps in the referral process. Potential YAC participants are referred to the court via their defense attorney. Their eligibility is determined by the YAC team who ensures they are male, between the ages of 18-25, living in Orange County, California (OC), and charged in OC with an eligible, non-violent felony offense. Offenses that are generally excluded from the court include sex crimes, gang-related crimes, and any crimes where weapons were used on a person. Following eligibility, suitability is conducted by case management staff at Orangewood Foundation, who meet with the eligible clients to determine if their needs and goals are aligned with YAC programming and resources. Once a potential client is deemed eligible and suitable, the randomization process is initiated. The UCI research team randomly assigns all eligible/suitable youth to either the YAC (treatment) or to traditional court (control/treatment as usual). Given that the number of eligible and suitable TAY far exceeds the current capacity of the YAC, randomization is the only ethical and just way to decide which young men can participate in the court. The UCI research team approaches both the young men

in the YAC and the young men who will go through the traditional court and gives each youth an opportunity to participate in interviews about all aspects of their life for a total of seven years.

Since the launch of the YAC program in 2018, youths' mental health and substance use needs have impacted their suitability for YAC, as the current staff and services are unable to address the severity of substance use disorder (SUD) symptomology present in many referred clients. While existing funding has allowed the court to add voluntary therapy services, there remain a significant gap regarding SUD assessment and treatment. By expanding the YAC program to include specialized services, treatment, and referrals to address substance use with Prop 47 funding, we can begin to address this crucial gap in services and allow more referred clients into the court. Prop 47 funding will be used to accomplish three main goals: (1) hire staff with SUD treatment expertise to conduct screenings, assessments, and treatment, (2) provide housing support, referrals, and linkage to external SUD recovery and other support services including employment, and (3) expand research assessments to measure SUD symptoms and service/treatment utilization and link to data capturing recidivism rates and various life outcomes for all YAC research participants.

Several steps will be taken to determine if existing and referred clients meet criteria for Prop 47 eligibility. At the suitability stage, all referred clients will be asked about their current and past substance use and mental health history. During biopsychosocial assessments completed over the first few months in the program, Care Coordinators (referred to as Case Managers interchangeably throughout this document) will determine clients' risks, needs, and strengths. Individuals with substance use and mental health needs will be referred to therapy services, which will include the provision of evidence-based and trauma-informed interventions for this youth population. Further individualized assessments with a licensed therapist (e.g., ASAM-informed assessments) may be used to determine the level of care needed for substance use recovery services, which may include linkages to recovery residences, sober living, inpatient, outpatient, MAT or detox. Additionally, in-house services at Orangewood Foundation will include determination of needs related to housing and workforce.

The YAC project consists of two primary components: the YAC service team (therapy and care coordination/resources) and the UCI research team which evaluates the effectiveness of the YAC across all randomized participants. The service team will ensure that interventions are implemented as intended during all phases of the project, meeting goals 1 and 2. The UCI research team is responsible for goal 3's program evaluation component, which includes all aspects of the research design, study implementation, data analysis, and data interpretation.

Goal 1: Reduce recidivism risk and promote positive life outcomes for justice-involved youth experiencing mental health and substance use disorders (SUD) enrolled in an existing court diversion program by expanding and improving on existing services to include staff with expertise on SUD treatment in order to conduct screenings, assessment and treatment. Goal 1 will be completed through the following objectives. Objective A: Expand existing mental health services offered to youth in the court by hiring a licensed therapist with expertise in SUD

treatment and certified in ASAM assessments. Objective B: Expand existing case management services provided to youth in the court by hiring case managers who specialize in SUD intervention practices. Objective C: Offer to conduct SUD/TCU Drug Screens and ASAM-informed screenings/assessments with participants with SUD history/symptom presentation and/or co-occurring mental health conditions to better guide treatment approaches. Objective D: Offer multidisciplinary/collaborative recovery support groups to participants with SUD history/symptom presentation and/or co-occurring mental health conditions. Objective E: Ensure multidisciplinary collaboration and provision of trauma-informed, developmentally appropriate, and culturally competent services through ongoing team trainings, team and advisory committee meetings, and supervision. The process measures for Goal 1 are hiring new staff (Objectives A and B), conducting ASAM-informed screenings and assessments and SUD/TCU drug screens (Objective C), support groups (Objective D), and local advisory committee meetings, treatment team and collaborative court meetings and case conferencing (Objective E).

Goal 2: Reduce recidivism risk and promote positive life outcomes for justice-involved youth experiencing mental health and substance use disorders (SUD) enrolled in an existing court diversion program by expanding and improving on existing services to provide housing support, referrals and linkages to external SUD recovery services based on level of care needed, and other community-based SUD supportive services. Goal 2 will be completed through the following objectives. Objective A: Based on level of care needed for SUD recovery/co-occurring mental health needs, refer and link YAC clients to external SUD recovery services, including a specialized recovery house managed by our team or other existing sober living/housing, medication management services, and outpatient treatment, reducing barriers to treatment access by funding private services, and leveraging Orangewood Foundation's housing navigation programs. Objective B: Enhance existing employment support/job skills training, case management, and wraparound services by referring and linking youth to trauma-informed and recovery-sensitive community partners and job placement organizations, leveraging Orangewood Foundation's employment navigation programs and improving chances of successful re-entry into the workforce with trained community partners. The process measures for Goal 2 are referrals and linkages to SUD recovery and housing services (e.g., detox placement, medication management/psychiatry, sober living, intensive outpatient, residential inpatient, comprehensive residential recovery services) (Objective A), and referrals and linkages to job skills training, employment readiness courses and/or programs (Objective B).

Goal 3: Expand on existing research interviews to include measures of substance use and co-occurring mental health disorder symptoms and service/treatment utilization and report on existing interview data capturing recidivism and various life outcome domains (e.g., employment) longitudinally for participants randomized into YAC and participants randomized to a control group for the duration of the grant period. Goal 3 will be completed through the following objectives. Objective A: Supplement existing longitudinal research interviews with questions specifically measuring SUD symptoms, history of service/treatment utilization, and perception of treatment/care staff within and outside of the collaborative court team. Objective B: Provide finalized report on aggregate data for all YAC study participants (Treatment and Control) with respect to SUD domains, recidivism, employment, and housing by June 30, 2028.

Objective C: Present research study data to examine the extent to which services provided through the YAC, including the newly added substance use treatment, is related to reduced recidivism and other positive life outcomes. The process measures for Goal 3 include gathering official arrest data form court and probation, as well as self-reported offending and system contact to measure recidivism, educational attainment, employment, substance use problems, mental health symptomology, and housing stability.

Project Logic Model

The following Project Logic Model includes all Young Adult Court program components as a broad program, with Prop 47 funding expansions **bolded** throughout the model.

Program Design

Eligible participants: 18- to 25-year-old males living in Orange County with low-level/first-time felony criminal charge, referred by the OC Public Defender's office, the Alternate Defender's Office or Private Defense Attorneys. The purpose of YAC is to provide justice-involved young adults with case management and therapy services that allows them to address behavioral challenges, connect with long-term community support, referrals, and linkages to meet their basic needs, in collaboration with UC-Irvine, Orangewood Foundation, OC District Attorney's Office, OC Probation, OC Public Defender's Office, OC Alternate Defender's Office, and the OC Superior Court.

Theory of Change



Young men 18–25-yearsold involved in the justice
system can often struggle
with the transition to
adulthood, some antisocial/criminal behaviors
and have poor access to
basic needs and
specialized support to
overcome trauma, Adverse
Childhood Experiences
(ACEs), substance use and
other behavioral
challenges.



Provide young people with specialized case management, access to voluntary therapy and substance use services through an evidence-based phased program, referrals, linkages, improvement of family functioning, intervening in peer-ecology, school/work ecology and community ecology.



Young people impacted by the criminal justice system, with case management and therapy support will reduce criminal justice involvement, substance use, have higher autonomy, learn life skills, and engage in pro-social behaviors within their communities, which will lead to successful YAC completion (i.e., dismissal of felonies/clean record).

Logic Model



RESOURCES/ INPUTS



ACTIVITIES



OUTPUTS



OUTCOMES



IMPACT

- Care Coordinators
- Specialized staff training
- OC Probation
- OC Public Defender
- OC Alternate Defender
- OC District Attorney
- OC Superior Court
- OC Superior Court clerks/staff
- Case Conferencing
- Collaborative Court Staffing
- Community Partners
- Grants
- Flexible funding
- Young Adult identified support system
- Bio Psycho Social Assessment
- Freedom Life Map
- SUD Screenings
- ASAM-informed assessment
- The Orangewood Resource Center
- Basic Needs
- SUD Treatment Opportunities
- Housing
 Opportunities
 (including TAY
 specific Recovery
 House and
 transitional housing)
- Apricot database
- UCI therapeutic staff
- Peer mentors
- Suitability assessment
- Local Advisory
 Committee members
- UCI research team

- Trauma informed team meetings
- SUD/TCU
 Drug Screens
- Self-help Groups
- Life Skills
 Workshops
- Recoveryfocused workshops
- Pro-Social
 Activities
- Activities

 Bio
- Psychosocial Assessments
- Freedom Life Map assessment
- Case Planning
- Linking and Referring
- Court Team
 Meetings
- Local Advisory Committee Meetings
- Social Network Maps
- Safety Plans
- Court appearances
- Probation meetings
- Therapy
- Phase Ups
- Graduations

- # of ACES Assessments completed
- # of Safety Plans Created
- # of Freedom Life maps completed
- # of SUD screenings conducted
- # of ASAM-informed assessments conducted
- # of YAC participants in each
 Phase
 - # of Court Sessions
- # of recovery-based support groups offered
- # of Local Advisory
 Committee meetings
- # of Youth with an updated budget
- # of direct-service team trainings
- # of research team training
- # of collaborative court staffings
- # of case conferencing meetings
- # of referrals by type to SUD recovery housing services
- # of referrals by type to SUD services
- # of referrals and linkages to community resources/partners (including job skills training)
- # of meetings with Case Manager
- # of clients who completed their restitution goals
- # Transition plans
- # Restitution payments

- # of phase ups
- # of felony dismissals (graduations)
- Recidivism

Young people receive specialized case management and therapy services that addresses their behavioral health needs, reduce criminal justice involvement, substance use, and dismisses felonies off their records. Community safety is enhanced through reduction of recidivism and SUD relapse and lifelong consequences of felony records are removed by the felony dismissal.



- Case notes
- Goal obtainment
- Safety plans written
- Young people self-reporting
- Case Manager observation
- Young people survey (annually)
- Outreach sign in sheets.
- Suitability

Process Evaluation Method and Design

The plan to document activities within the project and/or services provided to each participant (e.g., maintaining a database, signup sheets): The Director of Data and Evaluation at Orangewood Foundation, Josh Meyers, will oversee the Database where all client data will be entered for case management services. Apricot is a HIPPA compliant database which is stored on AWS servers and is backed by two factor authentication. Individual Care Coordinators have access to Apricot and will enter service records no later than 48 hours after service delivery. Service records are stored on a case note that denotes date, time, location, method of contact, person contacted, linkages, referrals, and a narrative that captures the topics discussed during a Case Management meeting. These case notes also contain meta data that can be extracted to authenticate date, time, and who created the case note. The metadata is immutable and cannot be altered by anyone, including the database administrators. Any groups held by the Orangewood Foundation are also entered into Apricot. Groups are documented on a Workshop form that captures date, time, location, workshop topic, and participants in attendance. UC-Irvine's clinical team, who oversee recovery-based support groups, therapy services, life skills workshops, prosocial events, and other resource management, will collaborate with Orangewood to combine their data on attendance and engagement in a collaborative system. UC-Irvine's data which includes client level records will be stored in Egnyte, a cloud-based file storage system. Data that is not joined to Apricot will be tracked via client's Apricot Record ID and client identifier documented by UC-Irvine. Data will be joined via .xls documents and uploaded into a client's document folder in Apricot.

How participants' progress will be tracked (e.g., start dates, attendance, dropouts, successful completions, progress milestones) & Process variables and how they will be defined and measured (tools/instruments used to collect the data and frequency of collection) & source used.: Clients who are enrolled in the Young Adult Court program are enrolled in the program within Apricot. The enrollment date is denoted as the date that all enrollment documentation is signed and entered into Apricot. Milestones are tracked by capturing the specific outputs outlined in the Young Adult Court Logic Model. Of particular importance are the client's phase (1 through 4 and graduation) at any given point in time, client's phase change, long term and short-term goal completion, and client case plan. Dropouts are tracked within Apricot via the enrollment feature. Any time a client drops out or, more importantly, completes the program, a Case Manager will document the date, time, and outcome of the exit. Progress on client-levels data such as workshop/prosocial event attendance (sign in sheets), engagement in clinical services (court progress summaries), and resources acquired through UC-Irvine's clinical team (Egnyte spreadsheet) will similarly be tracked through the aforementioned Egnyte procedures.

Project oversight structure, decision-making, and monitoring will be overseen by Orangewood Foundation and UC-Irvine clinical leadership staff (i.e., Tami Di Paolo, Josh Meyers, Marie Gillespie, Elizabeth Cauffman) through monthly-to-quarterly operational

meetings to ensure accurate and secure data management. Dr. Cauffman will also oversee the implementation of the program as a whole, ensuring appropriate eligibility/suitability criteria is met, assigning individuals to groups within the court, overseeing all program activities and ensuring they are implemented to fidelity (including court procedures, clinical procedures, and team collaborations). To ensure the project is implemented to fidelity and found effective, multiple meetings are in place to leverage diverse voices in the decision-making process and ensure the best-fitting evidence-based services are being provided. These include weekly case conferencing meetings with all direct-service staff (probation officer, case managers, therapists, and supervisors), bi-weekly court staffings with the aforementioned staff in addition to all court staff (Judge, attorneys, clerks) and followed by open court appearances whereby youth themselves provide feedback on services and needs, monthly operational meetings with OF and UCI leadership, annual all-staff operational meetings, and Local Advisory Committee Meetings specifically for Prop 47 expansion of SUD services, which will also invite the input of the public and other key stakeholders (e.g., peer mentors with lived experiences, Samueli Foundation, community members). Data analyses are discussed in the following section in depth.

Outcome Evaluation Method and Design

Research Method and Design

The Outcome Evaluation for the YAC study portion will be conducted by the UC Irvine research team and will be led by the principal investigator, Professor Elizabeth Cauffman. Dr. Cauffman will oversee all aspects of the research design, study implementation, data analysis, and data interpretation. In addition to Dr. Cauffman, the project will be supervised by a research manager, who will also serve as the data analyst, and a project coordinator. The research project will also be supported by several undergraduate and graduate student researchers. As described previously, the YAC is a collaborative and specialized court that was designed to hold 18 to 25 year old young adults accountable in a developmentally appropriate way. The goal of the YAC is to reduce recidivism and improve mental health and socio-economic outcomes for eligible young men enrolled in the court. It is hoped that by improving the life outcomes for the young men who go through the court, we will ultimately make communities safer. More information about the YAC, including the who, the what, and the how, is provided in the other sections.

For this section on the Outcome Evaluation, it is important to keep in mind that there are two critical components of the YAC. First, young men who are referred to the court and determined to be eligible and suitable are *randomly selected* for the YAC. Eligible/suitable young men who are randomly selected for the YAC become the treatment group, plead into the court, and receive all of the developmentally appropriate and individualized treatment, therapy, and case management services described in other sections. Young men who are eligible/suitable for the program but not randomly selected become the control group and continue through traditional legal proceedings (i.e., "court-as-usual"). This randomized selection enables the second component of the YAC, a research study built upon this randomized controlled (RCT).

Second, the UC Irvine team is conducting *a RCT research study* to empirically examine whether young men who participate in the YAC (i.e., the treatment group) have better short- and long-term outcomes than the young men who were eligible for the program but were not randomly selected (i.e., the control group). The ability to conduct a RCT to examine the effectiveness of the YAC is one of the biggest strengths of the project, given that RCTs are the gold standard for program evaluation. This means that for all of the desired outcomes (include substance use recovery services and perceptions of resources), we will be able to statistically compare the young adults who received the YAC treatment and similar young men who were not randomly selected for the YAC treatment longitudinally. The project is successful if the YAC treatment group has lower recidivism rates, better mental health, lower substance use, and/or better socio-economic outcomes than the control group. The goal is to have approximately 150 individuals in both the treatment and control groups (total N = 300). The UC Irvine research team will conduct in-person (and, when necessary, virtual) structured interviews with YAC and control participants to collect data across a variety of domains (see Table X). In addition, the research team will collect official records related to recidivism. The research interviews are designed to understand whether and how the YAC (compared to traditional court processing) is related to short- and long-term behavioral, psychological, and socio-economic outcomes. Ultimately, the research team will use empirical data to understand whether, how, and for whom the court is related to desistance, sobriety, self-sufficiency, and other sustained positive outcomes. The research study component of the YAC will be able to produce empirical guidelines for evidence-based best practices on how to best work with 18- to 25-year-old young men in the legal system. The funds from this Prop 47 grant are being used to expand the existing research assessment in order to better measure substance use, co-occurring mental health disorder symptoms, and the young men's service/treatment utilization and perception of resources they receive.

As participants are all adults, consent for the research study will be obtained using a study information sheet at the time of interviews. Each participant will be informed of the nature of the study, told that participation is entirely voluntary, that they will not be penalized for declining to participate, that their participation will not impact their legal status, and that data collected will only be used or revealed for research or statistical purposes. Participation in the research study will have no impact on participants' ability to enroll in the YAC.

Young men in the YAC treatment group and control group who agree to the research study will be interviewed regularly across a seven-year period. While the primary study continues to capture longitudinal data from ongoing participant enrollment since 2018, the analyses specific to evaluating outcomes for the new Prop 47 project will focus on the three years covered by the Cohort 4 funding cycle. The first interview, "baseline," occurs after randomization and before the treatment group pleads into the YAC. The self-report surveys measure a variety of health, social, emotional, and behavioral outcome variables, in addition to several risk and protective factors (e.g., future orientation/optimism, stable housing and employment, favorable perceptions of the legal system) that may contribute to long-term crime desistance and success in other life domains (see Table X). With existing funding, interviews are conducted after group randomization (baseline), and at regular intervals at 3 months, 6 months, 1 year, 1.5 years, 2 years, 2.5 years, 3 years, 4 years, 5 years, 6 years, and 7 years following the baseline interview. See below for an illustration of the timing of the research interviews.



Research interviews with the participants are conducted in locations that are convenient for the young men. When necessary, interviews are conducted in secure facilities or virtually (e.g., UC Irvine HIPAA Video Conferencing via Zoom). Interviews are conducted on password-protected tablets via software programs such Qualtrics to increase efficiency, reduce data entry errors, and to make the interviews interactive by incorporating question-specific skip and display logic. See the table below for a selection of the type of data collected during the research interviews. Data collected as part of the research study are protected by a Certificate of Confidentiality (https://grants.nih.gov/policy-and-compliance/policy-topics/human-subjects/coc) issued by the Department of Health and Human Services.

Table X: UC Irvine Research Team Self-Report Survey Data

Table A. UC II vine Research Team Sen-Report Survey Data	
Outcomes	Recidivism (self-reported via the Self-Report of Offending measure
	that is highly used and validated, Huizinga et al., 1991)
	· Self-reported arrest and system contact
	· Educational attainment
	· Employment attainment
	• Substance use symptoms and SUD treatment service utilization
	· Mental health symptoms and treatment service utilization
	Housing stability and recovery housing utilization and perceptions
Risk and	· Perceptions of legal institutions and legal actors (i.e., judges; police;
Protective	probation officers)
Factors	· Perceptions of opportunities for success
	· Social support systems
	· Experience of barriers due to criminal behavior
	· Self-sufficiency across living domains
	· Perceptions of neighborhood
	· Deviance of peer networks; gang activity
	· Perceived discrimination
	· Perceived self-efficacy/readiness in job and school
	· Violence exposure
	· Psychosocial maturity

With the new Prop 47 funds, we will be able to add several new questions related to substance use and service utilization (**bolded** above), such as questions specifically related to drug treatment programs and sober living homes, the impact of drugs and alcohol on several aspects of the young men's lives, and the young men's readiness to change to their substance use behaviors.

A very important goal of the research study is to maintain a high sample retention across the study period. This means that we would like to see a high percent of people who start the

study to participate in each of the follow up interviews (>70%). We will utilize several established strategies to encourage retention. For example, the participants will be financially compensated for their interviews according to an escalating payment plan. Funds for participant payments have already been secured (i.e., leveraged funds). In addition, contact information will be updated at the end of each interview to maintain valid physical addresses, mailing addresses, e-mail addresses, phone numbers, and contact information for friends/family who may know how to reach participants in the future. Moreover, in all interactions with the participants, the UC Irvine research team strives to maintain a level of professional rapport that allows the participants to feel heard and respected. The research team is confident in their ability to recruit and retain study participants given their demonstrated high retention rates with similar high-risk samples of justice-involved-young adult men (e.g., Crossroads Study and the Pathways to Desistance study)

Consistent with a multidisciplinary perspective, the research team will also collect official arrest records for both the YAC treatment and control groups. In particular, the research manager and project coordinator will coordinate with the courts and the probation department to collect official data related to recidivism on the study participants. These data will include information related to prior arrests as well as charges that are filed during the study period (which may be during and/or after the program). Variables collected will include dates, specific charges, and dispositions. After variables are obtained, data will be cleaned, coded, and the research team will determine whether each arrest occurred prior to, during, or after the program. We will also calculate the participant's age at each arrest as well as the length of time between program start date and each arrest.

Research Analysis Plan

Several analytic strategies will be utilized to examine the program outcomes. The project is successful if the YAC treatment group has better short- and long-term outcomes than the control group. Note that the research manager (Dr. Jordan Beardslee) for this project has a very strong analytic background and is comfortable executing all of the planned analyses for this project.

A preliminary step will be to conduct imbalance tests to determine the extent to which the randomization process successfully reduced pre-existing group differences at baseline. For example, we will test whether the YAC treatment and control groups differ on factors such as demographics, neighborhood information, substance use, mental health, self-reported offending, and prior arrest histories. We will use basic inferential analyses for this goal such as regressions, t-tests, chi-square analyses, and ANOVAs. Factors that are significantly related to group status may be used as control variables in the primary analyses.

Next, we will use several methods appropriate for longitudinal data to examine whether the young men in the YAC treatment group have better short and long-term outcomes than young men in the control group. For example, we will use Generalized Estimating Equations (population average models), growth curve models within a structural equation framework, event history models, fixed and random effect models, autoregressive models, and hybrid models such as the latent variable-autoregressive latent trajectory models. For all of these models, the primary

predictor will be the group status variable (i.e., YAC treatment versus control) and we will control for any variables identified in the imbalance testing. These tests will allow us to determine whether the YAC treatment group differs from the control at any point in time, and also whether the rate of change during the study period differs between the two groups. Because the groups are randomly assigned, we will be able to statistically examine whether recidivism rates and other outcomes are due to the YAC program itself and not to some other (potentially unmeasured) factor(s) unrelated to the project. Furthermore, given that not all YAC treatment individuals will receive (or accept, as many program services are voluntary) the same interventions, we will also attempt to measure and control for the type of program interventions the participant is engaged with, in an effort to statistically isolate the positives (if any) impacts of each program intervention (e.g., individual therapy with SUD counselor, group therapy, outpatient community treatment, recovery house resident).