

**State of Connecticut
Judicial Branch
Court Support Services Division**

**REGIONS Juvenile Justice Process and
Outcome Evaluation**

Final Process and Outcome Evaluation Report

Appendices

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Appendix A. Process Evaluation Methodology

To gather information for the process evaluation, DSG reviewed audit reports and JBCSSD policies and procedures, analyzed data in state databases, reviewed juvenile files, conducted in-person and remote interviews and focus groups, observed treatment groups, and conversed with other REGIONS staff. JBCSSD led several meetings with DSG researchers to explain the various datasets (e.g., CMIS, CDCS, electronic health records related to the metrics). DSG also met regularly with JBCSSD administrators and leadership.

DSG staff and consultants conducted site visits to three courthouses and seven REGIONS residential treatment programs (See Table A.1). During these site visits, we obtained information through interviews, focus groups, and observations. We also conducted follow-up site visits to some of the residential treatment programs to observe additional treatment groups.

Table A.1. DSG Site Visits

Date	Site Visit	Number of DSG Evaluators Onsite
July 19, 2021	Hartford REGIONS Secure Treatment Program	5
July 20, 2021	Hartford Community Partners in Action (CPA) REGIONS Staff-Secure Treatment Program	5
July 20 and 23, 2021	Hamden CPA REGIONS Secure Treatment Program	5
July 21 and 22, 2021	Bridgeport REGIONS Secure Treatment Program	2
July 21 and 22, 2021	Milford Boys and Girls Village REGIONS Staff-Secure Treatment Program	3
Aug. 11, 2021	Bridgeport Superior Court for Juvenile Matters	2
Aug. 12, 2021	Hartford Superior Court for Juvenile Matters	2
May 5, 2022	Willimantic Superior Court for Juvenile Matters	2
May 25, 2022	Journey House, Natchaug Hospital Limited-Secure REGIONS Treatment Program	3
May 26, 2022	Waterbury Connecticut Junior Republic (CJR) REGIONS Staff-Secure Treatment Program	3
July 18, 2022	Hamden CPA REGIONS Secure Treatment Program	1
July 19, 2022	Bridgeport REGIONS Secure Treatment Program	1
July 20, 2022	Hartford REGIONS Secure Treatment Program	1
July 21, 2022	Hartford CPA REGIONS Staff-Secure Treatment Program	1
May 16, 2023	Hartford CPA REGIONS Staff-Secure Treatment Program	1
May 17, 2023	Hamden CPA REGIONS Secure Treatment Program	2
May 17, 2023	New Haven Superior Court for Juvenile Matters	2
May 17, 2023	Youth Advocate Program's (YAP's) Credible Messengers Program, New Haven	1
May 18, 2023	YAP Credible Messengers Program, Bridgeport	1
May 18, 2023	Linking Youth to Natural Communities (LYNC) Program	1

Note: We originally planned to visit the New Haven Superior Court for Juvenile Matters on Aug. 10, 2021, but several staff members tested positive for COVID-19, so this site visit was changed to remote interviews and focus groups.

Interviews and Focus Groups

This report reflects the input, opinions, and perspectives of individuals involved with the post-adjudicatory juvenile justice process. Before each interview or focus group, we conveyed the following information to the participant(s):

Everything you share in the interview [or focus group] will be treated as confidential by project staff. The answers you give will be kept private. We want you to feel free to be honest. We will use this information to write a final evaluation report for the Judicial Branch of the State of Connecticut. It will describe what services were most helpful and what additional services are needed. Your name will not be used in any reports. Please note that your participation in the interview [or focus group] is entirely voluntary and your responses will remain confidential. You can decline to answer any questions and can stop participating at any time.

Through in-person and remote interviews and focus groups, we were able to discuss Court Clinic, residential treatment, re-entry, and probation metrics with the following justice process decision-makers, staff, and stakeholders:

17 Court Clinic staff

- 13 clinical coordinators (four focus groups)
- 4 Court Clinic auditors (individual interviews)

49 Court staff and attorneys

- 27 probation officers (three focus groups)
- 2 postconviction attorneys (one focus group)
- 8 public defenders (three focus groups)¹
- 6 juvenile matters judges (individual interviews and one focus group)
- 5 prosecutors (three focus groups)
- 1 deputy clerk

75 REGIONS treatment program staff (most completed individual interviews, though some participated in focus groups)

- 15 juvenile detention officers/youth mentors
- 14 reintegration mentors²
- 8 licensed mental health clinicians and other clinical staff
- 7 shift supervisors/senior mentors
- 4 program managers
- 4 classification and program officers/case and education coordinators
- 4 program and services supervisors
- 3 superintendents and deputy superintendents
- 2 rehabilitation therapists
- 2 unit managers
- 2 teachers
- 2 continuous quality improvement (CQI) consultants³
- 1 school principal
- 1 school social worker
- 1 case and education coordinator

¹ Public defenders and prosecutors were in the same focus groups.

² Throughout the document, we sometimes include the reintegration mentors with the community-based providers because the mentors also work in the community.

³ The CQI consultants work for Correctional Healthcare Quality Improvement Solutions.

- 1 assistant program manager
- 1 director of operations
- 1 psychiatrist
- 1 family support specialist

10 JBCSSD Central Office Administrators (all completed individual interviews)

- 1 REGIONS clinical director⁴
- 1 clinical coordinator supervisor
- 2 juvenile residential gatekeepers
- 1 manager of contracted REGIONS programs
- 2 milieu specialists
- 1 deputy director, Juvenile Probation Services
- 1 regional manager, Juvenile Probation Services
- 1 court planner II

17 REGIONS juveniles

- 4 from Hamden Community Partners in Action (CPA) REGIONS Secure Treatment Program
- 3 from Hartford REGIONS Secure Treatment Program
- 3 from Bridgeport REGIONS Secure Treatment Program
- 3 from Journey House, Natchaug Hospital Limited-Secure REGIONS Treatment Program
- 2 from Waterbury Connecticut Junior Republic REGIONS Staff-Secure Treatment Program
- 1 from Hartford CPA REGIONS Staff-Secure Treatment Program
- 1 from Milford Boys & Girls Village (BGV) REGIONS Staff-Secure Treatment Program

7 parents/guardians

- 5 parents/guardians of juveniles from Hartford REGIONS Secure Treatment Program
- 2 parents/guardians of juveniles from Hamden CPA REGIONS Secure Treatment Program

12 community-based service providers⁵

- 4 Multisystemic Therapy–Family Integrated Transitions (MST–FIT) clinicians
- 3 education liaisons (Bridgeport, Hartford, and Stamford)
- 2 credible messengers from New Haven and Bridgeport (an initiative of the Youth Advocate Program)
- 2 program staff from Linking Youth to Natural Communities (LYNC) [a program of Connecticut Renaissance]
- 1 supervisor of MST–FIT clinicians

Also, DSG engaged in several ad hoc discussions with stakeholders (outside of these scheduled interviews) to provide feedback. The final report reflects the input, opinions, and perspectives of about 200 individuals involved in the new post-adjudicatory juvenile justice process.

⁴ Throughout the document, feedback from the REGIONS clinical director was included within the residential treatment provider perspective.

⁵ Probation officers (who are listed above) also provided information about the risks, challenges, and other types of experiences youths encounter when being discharged, during reentry, and when they return to the community.

Administrator and Staff Interviews. The JBCSSD Central Office administrators, REGIONS staff, and community-based provider interviews were coordinated through JBCSSD central administration and the DSG project director. On-site interviews were recorded by hand on paper or on a laptop. Remote interviews were conducted using GoToMeeting, Zoom, or Microsoft Teams. The administrator and staff interviews were sometimes recorded and transcribed.

Parent/Guardian Interviews. REGIONS program staff and some probation officers advertised the need for parent interviews through flyers that DSG created and through word of mouth. DSG scheduled interviews directly with parents through text messages. DSG interviewed parents/guardians using Zoom, Microsoft Teams, and phone calls. None of the parents requested an in-person interview. Parent/guardian interviews were recorded by hand on a laptop or recorded and transcribed. After participating in the interview, parents/guardians received a monetary gift card of their choosing (e.g., Walmart gift card, Visa gift card, Cash App) in the amount of \$25.

Youth Interviews. When DSG was on site visits to residential programs, staff asked youths if they would like to be interviewed. Each youth interview was in person and recorded by hand on paper or on a laptop.

To analyze the information gathered from these interviews, we first entered all the information, by metric, into a database. We then used open and closed coding to complete the qualitative data analysis. Open coding was used to identify emergent themes and key quotes that illustrated the insights gathered from interviewees. Closed coding was used to quantify information gathered during interviews. The quantification allowed us to extract information specifically related to the project metrics. A DSG researcher reviewed the transcript of each interview and organized the data into a matrix that corresponded to the metrics. The project lead reviewed a subset of the interviews to ensure quality control.

Treatment Group Observations

From July 2021 through July 2022, DSG residential treatment experts observed Dialectical Behavior Therapy (DBT) groups at each of the seven residential programs. In four of the programs (Bridgeport, Hartford Secure, Hartford Staff-Secure, and Hamden), groups were observed twice—once in July 2021 and again in July 2022. Each group was observed by one or two members of the project team. Observers followed an established observation protocol during the group sessions. This protocol included observing the entire group, sitting in an unobtrusive location within the group’s sitting area, and not participating in the group. A group observation form was developed and used to record information about the group process, facilitator skills, group activities, and participant engagement.

Policy Review

DSG staff reviewed all JBCSSD Policy and Procedures documents that they could readily locate, and they worked with JBCSSD to find additional policies that were not easily obtainable. As appropriate, we measured achievement of selected metrics by determining the extent to which staff complied with standards established in policies. For example, JBCSSD Policy and Procedure 6.116 (Clinical and Educational Services, Referral Process for Forensic Clinical Assessment [Judicial]) requires that the service memo be completed within 15 days, so we measured the number of days from the date the Court ordered the evaluation to the date the service memo was completed. In the discussion of these metrics (and others when applicable), we identify the relevant policy.

CDCS Dataset

For the preliminary process evaluation, DSG researchers received CDCS data on 202 REGIONS stays and used these data to provide feedback on a limited number of metrics in the preliminary process evaluation report. Because this original dataset lacked information on a number of cases and because the data management system had incorporated new data fields, DSG submitted a new data request in 2022. Data were requested on all intakes to REGIONS from January 1, 2019, through December 31, 2021. The data included demographics (e.g., birthdate, sex, race, ethnicity, ID number, facility name, court location), treatment information (e.g., ITP meeting dates, treatment dates, participation in nonclinical activities [types of activities and dates], psychiatric interview dates, START:AV dates, monthly ITP dates), intake dates, discharge dates, assessment results, and educational outcomes (e.g., education plan, credits earned, credits granted, seat time). In March and April 2022, JBCSSD provided the research team with some of the requested data. Not all the requested data were available, and some data collection fields were only recently added, providing few cases for analyses. For example, CDCS did not have available data for any requested education variables, and data on first START:AV dates were limited to a small proportion of cases. Data were available for 354 REGIONS stays. These 354 stays represented 193 youths (i.e., multiple youths had multiple REGIONS stays).

In addition, CDCS data were provided on individual services received during the 354 unique stays of 193 youths. This dataset on 354 unique stays included 21,134 records of individual services provided. These instances contained information on the client ID (used to merge with other datasets), referral and screening dates, information on the type of service received (e.g., clinical individual session, case management session, clinical family sessions, reintegration mentor sessions). Finally, while the previous dataset provided the researchers with information on individual sessions, a third dataset provided the researchers with information on group sessions. This dataset contained 6,988 group sessions for the 354 unique stays. This dataset included session date and time as well as information on the type of session (e.g., DBT skills group, life skills, girls circle, restorative circle, not-a-number).

After cleaning and organizing the data from the CDCS datasets, we used the data to assess the appropriate metrics in Residential Treatment (the second component), as follows:

Residential Treatment – Admission and Treatment Plan Development

- Metric 29. Effectiveness and quality of the admission process
- Metric 32. Number and percentage of intakes where the initial monthly Integrated Treatment Plan meeting is scheduled at intake
- Metric 34. Number and percentage of admissions interviewed by the psychiatric staff within 10 days
- Metric 35. Number and percentage of admissions with a START:AV completed within 5 days

Residential Treatment – Treatment Approach

- Metric 45. Rate of participation of non-REGIONS staff (client’s family, Juvenile Probation Officer, attorney, or others) in monthly Integrated Treatment Plan (ITP) Meetings
- Metric 48. Number and percentage of clients who receive weekly group and individual therapy sessions that specifically address their treatment goals associated with identified vulnerabilities/risk areas
- Metric 49. Average number of clinical group sessions per week, average number of individual sessions per week, average number of nonclinical groups per week

- Metric 50. Number and percentage of clients receiving weekly family treatment sessions

Residential Treatment – Discharge Summary

- Metric 66. Rate of consensus in discharge planning
- Metric 70. Identification of types of post-discharge services that are most common

Case Management Information System (CMIS) Dataset

DSG received data from CMIS related to the processing of court clinic service memos on April 14, 2023. There were 269 rows of data in the dataset. Data from this information system were used to assess the following metrics:

Court Clinic – Effectiveness of the Clinical Coordinator Role

- Metric 3. Timeliness of interview scheduling
- Metric 4. Timeliness of report completion

Review of Service Memos

According to Policy 6.116 (effective June 18, 2019), the clinical coordinator will provide the Court with a Service Memorandum for Residential Placement in response to an order and completed referral packet to accomplish the following: 1) a forensic clinical assessment, 2) an assessment for the potential for risk of harm to others, and 3) an assessment of the need for staff secure or secure residential treatment. The Service Memorandum (hereafter referred to as the service memo) should, at a minimum, include the following sections: 1) Reason for Referral/Identifying Information, 2) Consent and Limits of Confidentiality (Forensic Notification), 3) Collateral Information, 4) Relevant Historical Information, 5) Current Clinical Functioning/Behavioral Observations, and 6) Findings and Recommendations Including Prognosis. The purpose of the service memo evaluation is to 1) provide the Court with an assessment of the potential for risk of violence to others, and 2) determine the need for REGIONS staff-secure and secure residential treatment (or Non-REGIONS residential and community-based treatment options).

DSG requested all REGIONS service memos from Jan. 1, 2019, through Sept. 8, 2022, and received 223 memos from JBCSSD completed by 17 clinical coordinators from 11 Courts. At the time of service memo completion, most youths were age 16 or 17. The ages ranged from 12 to 19 (there was only one 12-year-old youth and one 19-year-old youth). The average age was slightly older than 16 and a half, and the median age was slightly younger than 16 and a half. Most youths were boys (88 percent). Of the 223 memos, 71 percent of the memos included information about race/ethnicity. These 159 service memos indicated that most youths were Black and/or Hispanic (see Table A.2). It is unclear whether the youths whose service memos were missing race/ethnicity information are of the same racial/ethnic backgrounds as the youths whose service memos specified their race/ethnicity.

Table A.2. Youth Demographics Extracted from Service Memos, 1/1/2019–9/8/2022

<u>Age</u>	<u>N / (%)</u>	<u>Sex</u>	<u>N / (%)</u>	<u>Race/Ethnicity</u>	<u>N / (%)</u>
12–13	8 (4%)	Male	197	Black (non-Hispanic)	89 (56%)
14	25 (11%)	Female	(88%)	White (non-Hispanic)	12 (8%)
15	48 (21%)		26	Hispanic (non-Black)	47 (30%)
16	67 (30%)		(12%)	Black (Hispanic)	9 (6%)
17	67 (30%)			Other	2 (1%)
18-19	8 (4%)			Blank	64 (n/a)

DSG extracted and analyzed data from the service memos to assess the following metrics:

Court Clinic – Effectiveness of the Clinical Coordinator Role

- Metric 3. Timeliness of interview scheduling
- Metric 4. Timeliness of report completion

Court Clinic – Effectiveness of the Forensic Formulation Model

- Metric 17. Extent to which the necessary data is available to inform the decision-making process and is reflected in the final recommendations provided in the Service Memorandum
- Metric 18. Rate of reference in the placement opinion to the five factors for or against Probation with Residential Placement
- Metric 19. Extent to which protective factors are considered in recommendations for treatment
- Metric 21. Extent to which trauma, culture, and gender are sufficiently identified and addressed in the recommendations
- Metric 22. Extent to which collateral information is integrated into the formulation
- Metric 23. Occurrences and frequency of placement opinions citing a history of violence, future violence risk, AWOL risk, prior treatment response, and current treatment amenability for or against a Probation with Placement recommendation
- Metric 24. Occurrences and frequency of noting strengths and an explanation of how to leverage strengths in the report toward behavior change
- Metric 25. Determine if there is a discernible pattern of clinical and behavioral needs for children recommended for placement versus those not recommended for placement

File Review to Address Metrics that Examine Information from More than One Tool

Several metrics required that the DSG team conduct file reviews of more than one tool or instrument. To select files, random stratified samples were drawn from the sample of CDCS youths ($n = 193$). Thus, cases were identified by taking the first REGIONS stay for each unique youth. This approach was used to ensure the unit of analysis was the youth and not the REGIONS stay (i.e., reduced the number of cases from 354 to 193). Data were then stratified by program, creating 7 strata (see Table A.3).

Table A.3. Stratified Data Sample of CDCS

Residential	Frequency	Percent	Valid Percent	Cumulative Percent
Journey House	43	22.3	22.3	22.3
REGIONS Secure-Bridgeport	38	19.7	19.7	42.0
REGIONS Secure-Hamden	3	1.6	1.6	43.5
REGIONS Secure-Hartford	39	20.2	20.2	63.7
REGIONS Staff Secure-Hartford	5	2.6	2.6	66.3
REGIONS Staff Secure-Milford	35	18.1	18.1	84.5
REGIONS Staff Secure-Waterbury	30	15.5	15.5	100.0
Total	193	100.0	100.0	

File review was set at 20 percent of cases, resulting in a sample size of 39 files ($193 * .20 = 38.6 = 39$). Applying the same logic to each strata resulted in the following samples sizes per strata:

- Journey House = 8.6
- Bridgeport = 7.6
- Hamden = 0.6
- Hartford Secure = 7.8
- Hartford Staff Secure = 1
- Milford = 7
- Waterbury = 6
- Total = 38.6

To adjust for rounding and to ensure that a minimum of two files were reviewed per strata, the following adjustments were made:

- Journey House = 8
- Bridgeport = 7
- Hamden = 2
- Hartford Secure = 7
- Hartford Staff Secure = 2
- Milford = 7
- Waterbury = 6
- Total = 39

The next step was to determine the sampling interval (i) for each strata following the formula of $i=N/n$, where N is the number of cases in a strata and n represents the number of cases to be sampled.

- Journey House
 - $i=N/n \rightarrow i=43/8 = 5.4 = 5$
- Bridgeport
 - $i=N/n \rightarrow i=38/7 = 5.4 = 5$
- Hamden = 2
 - $i=N/n \rightarrow i=3/2 = 1.5 = 1$

- Hartford Secure
 - $i=N/n \rightarrow i=39/7 = 5.6 = 5$
- Hartford Staff Secure = 2
 - $i=N/n \rightarrow i=5/2 = 2.5 = 2$
- Milford
 - $i=N/n \rightarrow i = 35/7 = 5$
- Waterbury
 - $i=N/n \rightarrow i = 30/6 = 5$

The last step was to randomly sort cases within each strata and take every nth case. For example, Journey House cases were randomly sorted and then every 5th case of the 43 cases was selected for file review.

We requested the following files for this sample: a) PrediCT report, b) SAVRY report, c) clinical coordinator service memo, d) initial ITP e) initial START:AV, f) Juvenile Probation Assessment/Case plan and g) final START:AV. We received files for 40 youths⁶.

Our final sample of 40 youths included:

- at least one PrediCT report for each of the 40 youths
- at least one Court Clinic service memo for 32 youths⁷ (which included summaries of the SAVRY)
- at least one ITP report for 36 youths⁸
- START:AV reports for 36 youths
- At least one probation case plan for 20 youths.

The metrics that were assessed using this sample of files included the following:

Court Clinic – Effectiveness of the forensic formulation model

- Metric 26. Extent to which the PrediCT, Service Memorandum and the REGIONS Integrated Treatment Plan match in identifying the critical static and dynamic risk, protective, and resilience factors in cases

Residential Treatment – Admission and treatment plan development

- Metric 39. Extent to which the clinical coordinators' work regarding the placement opinion, formulation, and service recommendations are integrated into REGIONS treatment plan development

Residential Treatment – Treatment Approach

- Metric 46. The ITP prioritizes violence risk and absconding risk; determine the degree of overlap or correspondence to other identified vulnerabilities/risk areas as determined by the START:AV, the Clinical Coordinator Recommendations, and the Juvenile Probation Assessment/Case plan

⁶ We received an extra file from Waterbury. We decided to include the file in analyses. Thus, 40 files were analyzed.

⁷ Service memos were missing for several reasons. Individuals without service memos included youths who were recommended for REGIONS through a psychological evaluation paid for by the Public Defenders' Office, youths who received a recommendation for REGIONS supported by a Solnit 30-day evaluation, and youths who were transferred from Department of Children and Families/Parole to judicial hearing.

⁸ Missing ITPs were generally due to youths being AWOL before ITP completion.

Re-entry and Probation

- Metric 75. Extent to which the final START:AV is integrated with the Juvenile Probation case plan to establish treatment and services for the transition to the community

We also used this sample to assess metrics that we originally hoped to assess using data from the CDCS system but when that data was not collected and available to DSG.

The Team held many meetings to identify the best way to assess these metrics. We started by assessing Metric 26. The purpose of file reviews for metric 26 was to assess the level of agreement/matching in risk levels between the different risk assessment tools used on REGIONS participants to assess their static, dynamic, and protective factors. More specifically, Metric 26 requested the extent to which PrediCT, the service memo–SAVRY section, the START:AV, and the ITP Case Formulation matched each other in identifying REGION participants' risk and protective factors.

While these tools do not overlap in all the domains that they assess, they measure many of the same areas. Therefore, the file review process sought to assess whether the risk levels of a participant in one tool matched the risk levels on another. For example, if a participant was scored as "High" in Impulsivity in the SAVRY, it was examined whether they also scored "High" on the same item in the START:AV, PrediCT, and the ITP Case Planning notes. Correctional best practices inform us that effective treatment starts with correct identification of the criminogenic risks and needs, therefore reviewing whether there is congruence in the scores of the different assessment tools is an important step in evaluating whether REGIONS participants are being assessed properly by the agency.

Four members of the team were engaged in the process of reviewing files obtained from REGIONS for Metric 26. The team met once every 2 weeks from September to December 2022 to discuss the coding process and ensure that this process had a high interrater reliability (meaning items were being coded similarly from each of the team members). The team used Microsoft Excel to code the different assessments. To start, major domains that fit items from all the assessments were constructed. Domains included areas such as: Disruptive Behavior Factors, Antisocial Attitudes and Beliefs, Substance Use Problems, Anger Management, Antisocial Associates/Peers, and so on. The team discussed at length which items would fit best in each of the created domains. While not all assessments used by REGIONS contain items that fit in every domain, all of them assessed similar areas. For example: Anger Management issues are assessed by the PrediCT, by the SAVRY, and are mentioned in the ITP for many program participants. An Excel coding sheet was constructed to include items from all the assessments according to each of the domains, making it easy to see the congruence between the assessments on particular items.

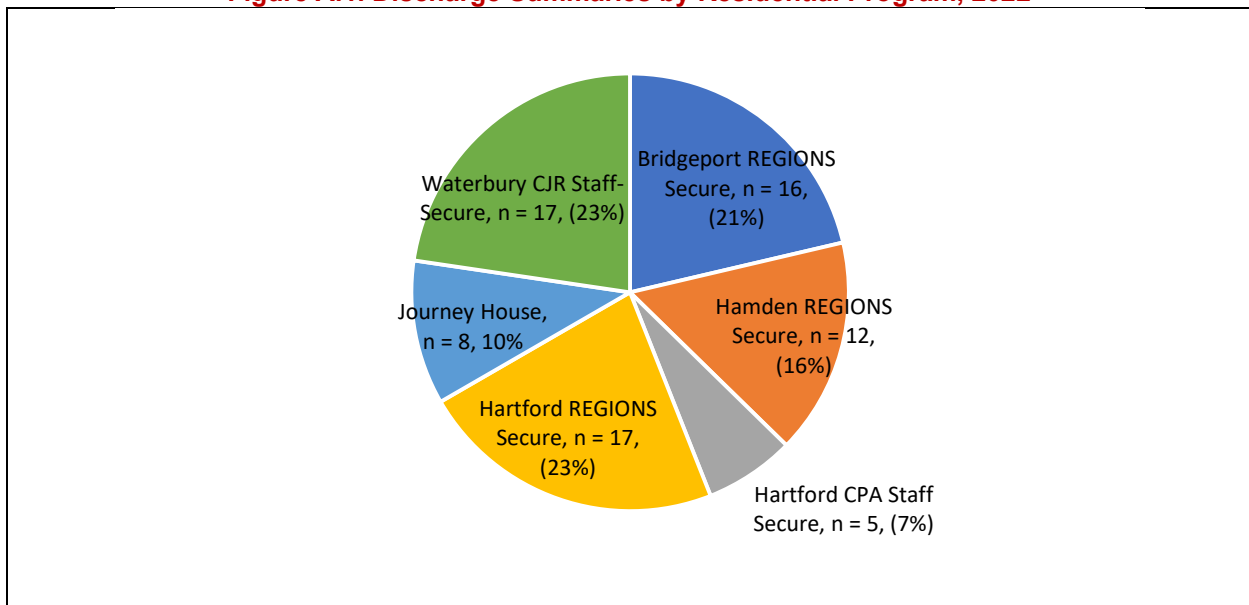
To ensure interrater reliability, three participant files were used to test the coding procedure. All four members of the team coded these files individually then met to discuss their scoring process and any issues that were identified during coding on a bi-monthly basis. Changes were made to the coding sheet if problematic items were found. Once the coding sheet was finalized, members of the team were assigned files to code individually. At the same time, the team continued to meet biweekly to discuss the coding process and any questions arising during the process. Using this process, the team coded 40 individual files.

A similar process was used to review files related to Metric 39, Metric 46, and Metric 75.

Review of Discharge Summaries

To assess some of the discharge metrics and the reentry and probation metrics, DSG requested 1 year of discharge summaries. We received 75 discharge summaries from six of the seven residential programs for youths who discharged from a REGIONS residential program in 2022 (see Figure A.1). A discharge summary is completed when a youth leaves one residential program for another residential program (e.g., is discharged from a secure program to a staff-secure program) and when a youth leaves and returns to the same residential program (e.g., leaves a program without permission [AWOL] and returns to that program). Thus, some youths received more than one discharge summary. The 75 discharge summaries were for youths who were admitted to the specific REGIONS program between April 15, 2021, and Dec. 22, 2022. Discharge dates were included in 23 of the discharge summaries and ranged from Jan. 2, 2022, to Dec. 21, 2022. Eleven percent of the discharge summaries were for girls, and 89 percent were for boys. We sometimes include text directly from the discharge summaries when assessing these metrics. In these instances, all names and other identifying information is either removed or replaced by "XXXX" or by writing "the client" instead of the name of the youth.

Figure A.1. Discharge Summaries by Residential Program, 2022



Data source: REGIONS discharge summaries for all youths who discharged in 2022. N=75 discharge summaries

The metrics assessed using discharge summaries included the following:

- 1) Metric 62. Utility and effectiveness of the multidisciplinary team approach in treatment and discharge planning
- 2) Metric 63. Criteria used to determine readiness for discharge, discharge plan (e.g., step-down program, community-based services, in-home services), and the effectiveness of the criteria used
- 3) Metric 64. Utility and effectiveness of using a consensus approach to treatment plan development and discharge planning
- 4) Metric 65. Rate of consensus in discharge planning
- 5) Metric 66. Appropriateness of length of stay
- 6) Metric 67. Number and percentage of initial Transition Planning Process meetings occurring 60 days prior to discharge
- 7) Metric 68. Number and percentage of final meetings occurring 30 days prior to discharge
- 8) Metric 69. Average number of Transition Planning Process meetings occurring prior to

- discharge
- 9) Metric 70. Identification of types of post-discharge services that are most common
 - 10) Metric 71. Identification of REGIONS treatment goals that are most likely to require additional work in the community
 - 11) Metric 72. Number and percentage of re-entry packets completed 30 days prior to discharge
 - 12) Metric 73. Identification of post-discharge services that are missing from the discharge service options to meet client needs
 - 13) Metric 74. Level of continuity and consistency in addressing treatment goals throughout the process

Examination of Court Clinic Audit Reports

DSG reviewed and extracted information from the 11 Court Clinic audits completed between Jan. 1, 2019 and May 31, 2021, and 14 Court Clinic audits completed between June 1, 2021 and May 31, 2022. We also reviewed *Clinical Coordinator REGIONS Evaluation Reports: Continuous Quality Improvement Audits Final Report—2020–21* (Kruh, Kemp, and Palmisano, 2021) and *Clinical Coordinator PWP Evaluation Reports: Continuous Quality Improvement Audits, FINAL REPORT—2021-22* (Kruh, Kemp, Palmisano, 2022). The audit tool was developed by Ivan Kruh, PhD, and Keith Cruise, MLS, PhD, in 2018 and approved by Tracy Duran of JBCSSD, with revisions made on an ongoing basis in coordination with Tracy Duran and Patrick Pierre.

The audit review tool rates key elements of the service memo on a scale of 2 (adequate), 1 (partially adequate) or 0 (missing). The auditors reviewed the evaluators' final evaluation report but did not have access to any of the raw data used for the evaluation (e.g., collateral records, evaluator notes). The evaluators' report included the following statement: "Although reviewing only the final work product places some limits on the quality of the review, it is generally considered the most cost-effective way to yield high quality audits" (Kruh, Kemp, Palmisano, 2022). Evaluation strengths were identified when the average score for an item was equal to or greater than 1.8. Evaluation weaknesses were identified when the average score for an item was equal to or lower than 1.0.

Other Sources

Several other sources were used to complete the process evaluation. For example, findings from a report summarizing the responses to a Performance-based Standards (PbS) Youth Reentry Survey was used to assess Metrics 38, 42, 45, 55, 56, and 59. This survey collected responses from 93 REGIONS youths from April 1, 2020, through Nov. 23, 2022. The average age of survey respondents was 16.8, and 85 percent were male.

Also, in July 2022, JBCSSD conducted a focus group of REGIONS youth, at the request of the Juvenile Justice policy and Oversight Committee (JJPOC) Re-Entry Subgroup, to obtain feedback from youths on barriers to re-entry, needs and experiences, and gaps in services. Findings from this focus group were used to assess Metric 77.

Appendix B. Sources of Information for Each Metric

Metric #	Metrics	Interviews with Court Clinic, Probation, and Other Court Staff	Interviews with Residential Program Staff	Interviews with Community-Based Staff	Interviews with Youth and Families	Interviews with JBCSSD Administrators	Other Interviews	Youth File Reviews	Analysis of CDCS or CMIS Data	Observations	Other	Service Memo Audits
A. Court Clinic												
Effectiveness of the clinical coordinator role												
1	1. Availability to assist court personnel	X										
2	2. Availability to the Court for emergent concerns	X										
3	3. Timeliness of interview scheduling							X	X			
4	4. Timeliness of report completion	X						X	X			
5	5. Consumer satisfaction with the Service Memorandum	X	X									
6	6. Value added to the juvenile justice process	X										
Effectiveness of the current CQI process												
7	1. Suitability of the audit tool	X										X
8	2. Number of reports reviewed					X		X				X
9	3. Number of training hours (pre-service and in-service)	X				X					X	
10	4. Number of case consultations with forensic experts	X				X						
11	5. Adherence to the requirement that quality assurance report reviews occur at the designated intervals for all clinical coordinators											X
12	6. Frequency and modification of practice based on feedback provided to the clinical coordinators	X				X						
13	7. Number and type of trainings generated through the CQI process	X				X						
Effectiveness of forensic formulation model												
14	1. Utility and validity of the forensic formulation model							X				
15	2. Extent to which the factors identified as relevant in the forensic formulation model design are effective in answering the referral questions							X				
16	3. Frequency of objections, expressed concerns, and/or modifications to referral questions	X				X						
17	4. Extent to which the necessary data is available to inform the decision-making process and is reflected in the final recommendations provided in the Service Memorandum	X						X				
18	5. Rate of reference in the placement opinion to the five factors for or against Probation with Residential Placement							X				
19	6. Extent to which protective factors are considered in recommendations for treatment							X			X	X
20	7. Balance and/or integration between addressing risk reduction needs and clinical needs	X				X						
21	8. Extent to which trauma, culture, and gender are sufficiently identified and addressed in the recommendations	X	X					X				X
22	9. Extent to which collateral information is integrated into the formulation	X						X			X	X
23	10. Occurrences and frequency of placement opinions citing a history of violence, future violence risk, AWOL risk, prior treatment response, and current treatment amenability for or against a Probation with Placement recommendation							X				
24	11. Occurrences and frequency of noting strengths and an explanation of how to leverage strengths in the report toward behavior change.							X			X	X
25	12. Determine if there is a discernible pattern of clinical and behavioral needs for children recommended for placement versus those not recommended for placement.							X				
26	13. Extent to which the Predict, Service Memorandum and the REGIONS Integrated Treatment Plan match in identifying the critical static and dynamic risk, protective, and resilience factors in cases							X				
Utility of court clinic data												
27	1. Evaluate timeframe for having sufficient data to allow outcomes to be evaluated (This metric was eliminated by JBCSSD in 2023. It is not assessed in this report.)											
28	2. Relevance of current data collection points; and Relevance and use of Court Clinic data in CMIS (Case Management Information System)					X			X			
B. Residential Treatment Model												
Admission and treatment plan development												
29	1. Effectiveness and quality of the admission process		X			X			X			
30	2. Number and percentage of admissions that have intake screening completed at arrival		X						X			
31	3. Appropriateness of instruments administered at intake				X			X	X			
32	4. Number and percentage of intakes where the initial monthly Individual Treatment Plan meeting is scheduled at intake		X			X			X			
33	a. Average/median number of days from admission to the initial Individual Treatment Plan meeting							X	X			
34	b. Number and percentage of admissions interviewed by the psychiatric staff within 10 days					X		X	X			

Metric #	Metrics	Interviews with Court Clinic, Probation, and Other Court Staff	Interviews with Residential Program Staff	Interviews with Community-Based Staff	Interviews with Youth and Families	Interviews with JBCSSD Administrators	Other Interviews	Youth File Reviews	Analysis of CDCS or CMIS Data	Observations	Other	Service Memo Audits
35	c. Number and percentage of admissions with a START-AV completed within 5 days		X					X	X			
36	d. Number and percentage of START-A Vs that include the family voice		X									
37	e. Method of evaluating client motivation for change		X									
38	f. Rate of identification of different learning styles and integration into treatment planning		X		X					X	X	
39	g. Extent to which the clinical coordinators work regarding the placement opinion, formulation, and service recommendations are integrated into REGIONS treatment plan development							X	X			
40	h. The number and percentage of Integrated Treatment Plans completed and signed within 15 days of admission							X	X			
41	i. Quality of the initial multidisciplinary team ITP meeting	X	X		X							
Treatment approach												
42	1. Quality and effectiveness of client engagement strategies		X		X					X	X	
43	2. Quality and effectiveness of family engagement strategies		X	X	X						X	
44	3. Utility of the weekly team meetings	X	X									
45	4. Rate of participation of non-REGIONS staff (client's family, Juvenile Probation Officer, attorney or others) in Monthly Individual Treatment Plan (ITP) meetings	X	X		X				X		X	
46	5. The ITP prioritizes violence risk and absconding risk; determine the degree of overlap or correspondence to other identified vulnerabilities/risk areas as determined by the START-AV, the Clinical Coordinator Recommendations, and the Juvenile Probation Assessment/ Case plan.											
47	6. The extent to which written treatment summaries are shared monthly with the JBCSSD Residential liaison and the Juvenile Probation Officer, and are used to enhance communication and team approach	X	X			X						
48	7. Number and percentage of clients who receive weekly group and individual therapy sessions that specifically address their treatment goals associated with identified vulnerabilities/risk areas		X			X			X	X		
49	8. Average number of clinical group sessions per week, average number of individual sessions per week, average number of nonclinical groups per week								X		X	
50	9. Number and percentage of clients receiving weekly family treatment sessions				X				X			
51	10. Extent to which substance use treatment needs are met		X		X							
52	11. Extent to which psychiatric treatment needs are met		X			X						
53	12. Effectiveness of milieu coaching to increase prosocial skills and decrease negative behaviors				X		X			X		
54	13. Appropriateness and effectiveness of programming to meet treatment goals (non-clinical groups, prosocial activities and recreation, enrichment activities, family activities, community home passes)	X	X		X					X	X	
55	14. Appropriateness of staffing by type and number		X		X					X	X	
56	15. Extent to which trauma, culture, and gender inform treatment and programming		X							X	X	
57	16. Extent to which educational and vocational needs are met.	X	X	X	X							
58	17. Extent to which demonstrable educational gains are evident											
59	18. Any evidence of disparate treatment based on race, ethnicity, or gender		X		X						X	
60	19. Presence or absence of objective and subjective determinants of treatment plan goal attainment, and a QA process to gauge consistency across clients and clinical teams		X									
61	20. The extent to which data from the START-AV is being used to evaluate the effectiveness of the REGIONS program model					X		X				
Discharge planning												
62	1. Utility and effectiveness of the multidisciplinary team approach in treatment and discharge planning	X	X			X						
63	2. Criteria used to determine readiness for discharge, discharge plan (e.g., step down program, community based services, in-home services), and the effectiveness of the criteria used	X	X	X	X							
64	3. Utility and effectiveness of using a consensus approach to treatment plan development and discharge planning											
65	4. Rate of consensus in discharge planning	X	X									
66	5. Appropriateness of length of stay	X	X	X					X			
67	6. Number and percentage of initial Transition Planning Process meetings occurring 60 days prior to discharge								X			
68	7. Number and percentage of final meetings occurring 30 days prior to discharge								X			
69	8. Average number of Transition Planning Process meetings occurring prior to discharge								X			
70	9. Identification of types of post-discharge services that are most common							X	X			
71	10. Identification of REGIONS treatment goals that are most likely to require additional work in the community							X				

Metric #	Metrics	Interviews with Court Clinic, Probation, and Other Court Staff	Interviews with Residential Program Staff	Interviews with Community-Based Staff	Interviews with Youth and Families	Interviews with JBCSSD Administrators	Other Interviews	Youth File Reviews	Analysis of CDCS or CMIS Data	Observations	Other	Service Memo Audits
72	11. Number and percentage of Re-entry packets completed 30 days prior to discharge							X				
73	12. Identification of post-discharge services that are missing from the discharge service options to meet client needs	X	X	X								
74	13. Level of continuity and consistency in addressing treatment goals throughout the process		X					X				
	Reentry and Probation											
75	1. Extent to which the final START-AV is integrated with the Juvenile Probation case plan to establish treatment and services for the transition to the community	X						X				
76	2. Identification of the roles that the Juvenile Probation Officer, Reintegration Mentor, Mentor, and Case & Education Coordinator, as applicable, play in this process, including how well service delivery is coordinated	X	X	X	X							
77	3. Number and percentage of clients who are connected with their home school prior to discharge	X	X	X	X			X				
78	4. Number and percentage of clients who make school visits prior to discharge		X		X			X				
79	5. Number and percentage of clients who are connected with vocational services, training or a job prior to discharge							X				
80	6. Number and percentage of clients who are connected with community-based and/or in-home services prior to discharge							X				
81	7. Number and percentage of clients who stay connected until the termination of their period of probation supervision	X	X	X	X							

Appendix C. Details About Metric 25: ***Determine if There Is a Discernible Pattern of Clinical and Behavioral Needs for Children Recommended for Placement Versus Those Not Recommended for Placement***

DSG assessed Metric 25 (Determine if there is a discernible pattern of clinical and behavioral needs for children recommended for placement versus those not recommended for placement) using quantitative methods based on information extracted from service memos completed between late 2018 through May 31, 2022.

Procedures

To determine if there is a discernible pattern of clinical and behavioral needs for children recommended for placement versus those not recommended for placement, data were retrieved from 230 service memos of youths interviewed from 2018 to 2022. Approximately 17 clinical coordinators conducted interviews with youths referred for consultation by 11 courts in the State of Connecticut. The purpose of the service memo evaluation was to provide the court with 1) an assessment of potential for risk of violence to others, and 2) a determination of the need for REGIONS staff secure residential treatment, REGIONS secure residential treatment, or non-REGIONS residential and community-based treatment options.

Descriptive statistics (means, standard deviations, proportions) on demographic variables, SAVRY future risk of violence, SAVRY protective factors, and PrediCT risk domains were obtained for the sample as a whole and separately for youth recommended for placement and those who were not recommended for placement. Two-sample *t*-tests with equal variances were conducted to determine whether there were statistically significant differences between the two groups. Logistic regressions were conducted assessing the impact of 1) future risk of violence, 2) protective factors, and 3) other risk factors on the odds of being recommended for REGIONS placement. Offense type and demographic measures were also included in the analyses as covariates. Listwise deletion resulted in the removal of 31 to 42 percent of cases (or 72 to 98 observations) due to missingness on key variables.

Participants

Table C.1 presents descriptive statistics of the participants. The sample comprised 230 youths, of which 201 (87 percent) were detained at the time of the interview. Males made up 88 percent of the sample and the average age of participants was 16 years. An estimated 73 percent were recommended for REGIONS placement, 9 percent were White, 54 percent were Black, and 25 percent were Hispanic. The most common charge was property crime (40 percent).

The majority were rated as having a moderate risk of future violence on the SAVRY (54 percent). About half (49 percent) had at least one protective factor: 4 percent were identified as having prosocial involvement, 27 percent had strong social support, 45 percent had strong attachments, 15 percent had a positive intervention attitude, 8 percent had strong school commitment, and 14 percent had resilient personality traits.

Close to half (46 percent) of the participants received a Tier V classification on the PrediCT risk assessment. In terms of the PrediCT risk domains, a relatively low percentage of participants scored “high” on at least one item of the mental health (19 percent) and callousness (27 percent) domains. More than half scored “high” on at least one item of the family distress (55 percent), anger and aggression (58 percent), substance use (61 percent), and impulsive/oppositional behaviors (65 percent) domains. Finally, three-fourths or more of the participants scored “high”

on at least one item from the non-compliance (75 percent), antisocial peers (79 percent), court (81 percent), and academic disengagement (86 percent) domains.

Measures

Outcome. REGIONS placement recommendation was a dichotomous variable which indicated whether or not the clinical coordinator recommended the youth for REGIONS placement (i.e., staff secure REGIONS placement, secure REGIONS placement). Information for this variable was obtained from the “Findings and Recommendation” section of the service memo.

Independent Variables. The SAVRY section of the service memo was used to obtain data for the SAVRY risk assessment, and the protective factors measured by the SAVRY. The SAVRY was composed of 24 risk items, including items related to clinical and behavioral needs. These risk items were grouped into three domains: historical, social/contextual, and individual/clinical. The **SAVRY violence risk** variable ranged from 1 to 3 where 1 indicated a “low” rating, 2 indicated a “moderate” rating, and 3 indicated a “high” rating. Dichotomous variables representing moderate and high SAVRY violence risk ratings (0=no, 1=yes) were included in the logistic regression models. The low SAVRY violence risk rating was left out as the reference category. The **protective factors** measure was a dichotomous variable which indicated whether the youth was identified as having any of the six protective factors present (i.e., prosocial involvement, strong social support, strong attachments, positive intervention attitude, strong school commitment, resilient personality traits). The following protective factors were dichotomous variables and were rated by the clinical coordinator as being absent (0) or present (1): **prosocial involvement, strong social support, strong attachments, positive intervention attitude, strong school commitment, and resilient personality traits.**

Several risk items from the PrediCT, including items assessing clinical and behavioral needs, determined the **PrediCT tier classification**, including Tier I, Tier II, Tier III, Tier IV, and Tier V. PrediCT tier classification was broken down into four (no youth received a Tier I classification in the sample) dummy variables representing each category of the variable. Dichotomous variables representing Tier III, Tier IV, and Tier V were included in the logistic regression models while the dummy variable representing the Tier II classification was left out as the reference category. The following variables were dichotomous variables which indicated whether the youth had at least one item under the specified domain rated as an area of concern (rated 3, indicating the youth was more extreme on the characteristics and signs being assessed than other justice-involved youth) on the PrediCT: mental health domain, substance use domain, impulsive and oppositional behavior domain, antisocial peers domain, callousness domain, anger and aggression domain, family distress domain, academic disengagement domain, court domain, and non-compliance domain.

Covariates. Gender was a dichotomous variable indicating whether the youth being referred was female (0) or male (1). The **age** of each child was calculated by subtracting the date of the service memo from the date of birth. **Race/ethnicity** was measured as a series of dichotomous variables indicating whether the youth was White, Black, or Hispanic (0=no, 1=yes). The “other races/ethnicities” category was the reference category and was left out of the analyses. Demographic information was retrieved from the “Reason for Referral/Identifying Information” section of the service memo. **Current charge** was a nominal variable (1=Probation violation, 2=Property crime, 3=Drug crime, 4=Crime against a person, 5=Other), which indicated adjudicated charge(s), or the charge(s) for which the youth signed a statement of responsibility and/or the charge(s) for which a plea was entered. Current charge was included in the logistic regression models as a series of dichotomous variables indicating whether the adjudicated charge(s), was a property crime, drug crime, crime against a person, or some other charge (0=no,

1=yes). Probation violation was the reference category and was left out of the analyses. Legal information for each youth was obtained from the “Reason for Referral/Identifying Information” section of the service memo.

Results

Descriptive Information. Descriptive statistics are presented in Table C.1, along with *t*-tests comparing youth recommended for REGIONS placement with youth not recommended for placement. There were no statistically significant between-group differences with regard to gender, age, and race. Compared with youth not recommended for placement, youth recommended for REGIONS placement had higher ratings of future risk of violence to others, PrediCT risk classification, substance use, impulsive and oppositional behavior, anger and aggression, and family distress, and lower ratings regarding the presence of protective factors overall, and each of the following individual protective factors: strong social support, strong attachments, and positive intervention attitude. These findings were statistically significant.

Logistic Regression

Model 1

To determine if there is a discernable pattern of clinical and behavioral needs for youth recommended for REGIONS placement versus those not recommended for placement, a logistic regression analysis was employed assessing the impact of the risk of future violence towards others, PrediCT classification, demographic characteristics, and current adjudicated charge on the odds of being recommended for REGIONS placement (see Table C.2). Listwise deletion resulted in the removal of 31 percent of cases due to missingness on variables included in the model.

The SAVRY violence risk assessment did not predict the odds of being recommended for REGIONS placement. However, PrediCT classification was a statistically significant predictor of the odds of being recommended for REGIONS placement. The odds of youth with a Tier IV classification on the PrediCT being recommended for REGIONS placement were about 28 times greater than the odds of youth with a Tier II classification. The odds of youth with a Tier V classification on the PrediCT being recommended for REGIONS placement were about 61 times greater than the odds of youth with a Tier II classification. Likewise, being charged with a crime against another person did significantly increase the odds of being recommended for REGIONS placement. The odds of youth charged with a crime against another person being recommended for REGIONS placement was 9 times greater than the odds of youth with a probation violation.

Model 2

This analysis examined the effect of having at least one of the six protective factors present in the SAVRY, PrediCT classification, current charge, and demographic characteristics on the odds of being recommended for REGIONS placement. Listwise deletion resulted in the removal of 31 percent of cases due to missingness on variables included in the model. The results indicated that the presence of any protective factor was not a statistically significant predictor of the odds of being recommended for REGIONS. However, again, PrediCT classification and being charged with a crime against another person were statistically significant predictors of the odds of being recommended for REGIONS placement.

Model 3

A third logistic regression was employed to assess the impact of the presence of each protective factor individually (i.e., prosocial involvement, strong social support, strong attachments, positive intervention attitude, strong school commitment, resilient personality traits); PrediCT classification; Current charge; and demographic characteristics on the odds of being

recommended for REGIONS. Listwise deletion resulted in the removal of 43 percent of cases due to missingness on key variables. Prosocial involvement had a small but statistically significant ($p < 0.01$) impact on the odds of being recommended for REGIONS placement. The remaining protective factors did not significantly predict the odds of being recommended for REGIONS. The PrediCT classification and being charged with a crime against another person were again statistically significant predictors of the odds of being recommended for REGIONS placement.

Model 4

A fourth model was employed assessing the impact of the presence of any protective factor; individual PrediCT domains (i.e., mental health, substance use, impulsive and oppositional behavior, antisocial peers, callousness, anger and aggression, family distress, academic disengagement, court, and non-compliance); current charge; and demographic characteristics on the odds of being recommended for REGIONS placement. Listwise deletion resulted in the removal of 30 percent of cases due to missingness on variables included in the model. The overall model was not statistically significant (results not shown).

Discussion

The PrediCT classification and crime against another person were the most consistent predictors of REGIONS placement recommendation. The SAVRY violence risk assessment rating, protective factors, PrediCT domains, and demographic characteristics had very little to no impact on the odds of being recommended for REGIONS. The lack of significance in terms of demographic characteristics signified that placement was fairly determined in terms of gender, age, and race/ethnicity.

The results from this study suggest that there was a discernable pattern of clinical and behavioral needs for youths recommended for placement versus those not recommended for placement. Youths recommended for placement were more likely to score higher (Tier IV or Tier V) on the PrediCT classification and have been charged with a crime against another person. However, these results should be considered preliminary, due to the large amount of missing data on key variables. The removal of so many cases can introduce selection effects, or bias, into the model. There is also a large imbalance in cases across groups, with more cases recommended for REGIONS placement than were not, which also may affect results.

Recommendations

Overall, this study demonstrated that youth recommended for REGIONS placement might benefit from programs and services that address clinical and behavioral needs that distinguish them from youth not recommended for REGIONS placement. SAVRY risk for future violence and protective factors were expected to play a significant role in placement recommendation. It is recommended that Connecticut REGIONS take an active approach to incorporating SAVRY risk for future violence and general delinquency into decision-making for placement recommendations. Additionally, better data are necessary to strengthen the validity of the findings. Clinical coordinators should aim to provide complete demographic information in the service memos and better data on protective factors in the SAVRY section of the service memo, as these were the measures with the most missingness. Finally, although clinical and behavioral needs were considered in ratings provided by the SAVRY risk of future violence and general delinquency risk assessment, assessing the individual impact of these needs may provide a more nuanced understanding of the differences between youth recommended for placement and those who are not. This is essential in determining what services youth in either condition would benefit from.

Table C.1. Descriptive Data by Group

Sample Characteristics	Combined		Not Recommended for REGIONS Placement		Recommended for REGIONS Placement		t
	N	M(SD)	N	M(SD)	N	M(SD)	
Male ^a	230	0.88(0.32)	61	0.93(0.25)	169	0.86(0.34)	1.46
Age ^b	230	15.79(1.19)	61	15.67(1.36)	169	15.83(1.13)	-0.90
White ^a	168	0.09(0.29)	42	0.09(0.30)	126	0.09(0.29)	0.15
Black ^a	168	0.54(0.50)	42	0.59(0.50)	126	0.52(0.50)	0.80
Hispanic ^a	168	0.25(0.44)	42	0.24(0.43)	126	0.26(0.44)	-0.30
Current Charge							
Property crime ^a	225	0.40(0.49)	59	0.37(0.49)	166	0.42(0.49)	-0.57
Drug crime ^a	225	0.04(0.19)	59	0.05(0.22)	166	0.03(0.17)	0.74
Crime against a person ^a	225	0.18(0.39)	59	0.15(0.36)	166	0.19(0.40)	-0.69
Other charge ^a	225	0.28(0.45)	59	0.32(0.47)	166	0.26(0.44)	0.93
SAVRY Measures							
SAVRY Violence Risk ^{c, e}	228	2.03(0.68)	60	1.87(0.62)	168	2.08(0.69)	-2.15**
Protective Factors Present ^a	230	0.49(0.50)	61	0.69(0.47)	169	0.43(0.49)	3.60*
Prosocial Involvement ^a	199	0.04(0.21)	58	0.09(0.28)	141	0.03(0.17)	1.79
Strong Social Support ^a	202	0.27(0.45)	57	0.38(0.49)	145	0.23(0.42)	2.29**
Strong Attachments ^a	207	0.45(0.50)	59	0.64(0.48)	148	0.37(0.48)	3.65*
Positive Intervention Attitude ^a	196	0.15(0.36)	55	0.24(0.43)	141	0.12(0.33)	2.03**
Strong School Commitment ^a	198	0.08(0.28)	56	0.12(0.33)	142	0.07(0.26)	1.23
Resilient Personality Traits ^a	197	0.14(0.34)	55	0.14(0.35)	142	0.13(0.34)	0.21
PrediCT Measures							
PrediCT Classification ^{d, e}	222	4.30(0.79)	60	3.93(0.95)	162	4.44(0.68)	-4.39*
Mental Health Domain ^a	228	0.19(0.39)	61	0.13(0.34)	167	0.21(0.41)	-1.43
Substance Use Domain ^a	228	0.61(0.49)	61	0.47(0.50)	167	0.66(0.47)	-2.53*
Impulsive and Oppositional Behavior Domain ^a	228	0.65(0.48)	61	0.51(0.50)	167	0.71(0.46)	-2.82*
Antisocial Peers Domain ^a	228	0.79(0.40)	61	0.72(0.45)	167	0.82(0.38)	-1.64
Callousness Domain ^a	228	0.27(0.44)	61	0.24(0.43)	167	0.28(0.45)	-0.53
Anger and Aggression Domain ^a	228	0.58(0.49)	61	0.47 (0.50)	167	0.62(0.49)	-2.01**
Family Domain ^a	228	0.55(0.49)	61	0.41(0.49)	167	0.60(0.49)	-2.65**
Academic Disengagement Domain ^a	228	0.86(0.34)	61	0.87(0.34)	167	0.86(0.34)	0.13
Court Domain ^a	228	0.81(0.39)	61	0.74(0.44)	167	0.84(0.37)	-1.72
Non-Compliance Domain ^a	228	0.75(0.43)	61	0.69(0.47)	167	0.78(0.42)	-1.40

Note: * = p < .01. ** = p < .05. ^a Dichotomous variable ranging from 0 to 1. ^b Variable ranges from 13 to 19. ^c Variable ranges from 1 to 3. ^d Variable ranges from 2 to 5. ^e Risk assessment. SAVRY= Structured Interview of Violence Risk in Youth. PrediCT= Prospective Risk Evaluation for Delinquency in Connecticut.

*JBCSSD REGIONS Juvenile Justice Process and Outcome
Evaluation Appendix C. Details About Metric 25*

Table C.2. Logistic Regression Predicting the Odds of Being Recommended to REGIONS

	Model 1 (N=158)			Model 2 (N=158)			Model 3 (N=132)		
	OR	SE	[95% CI]	OR	SE	[95% CI]	OR	SE	[95% CI]
Intercept	0.00	0.01	[0.00, 1.31]	0.00	0.01	[0.00, 1.73]	0.00	0.00	[0.00, 4.23]
Male ^a	0.55	0.40	[0.13, 2.33]	0.51	0.38	[0.12, 2.16]	0.49	0.50	[0.06, 3.66]
Age ^b	1.25	0.22	[0.89, 1.76]	1.29	0.22	[0.91, 1.81]	1.44	0.31	[0.95, 2.19]
White ^a	0.54	0.52	[0.08, 3.55]	0.66	0.62	[0.10, 4.15]	0.20	0.25	[0.02, 2.31]
Black ^a	0.97	0.72	[0.22, 4.16]	1.09	0.81	[0.26, 4.64]	0.33	0.35	[0.04, 2.76]
Hispanic ^a	1.09	0.89	[0.22, 5.43]	1.33	1.08	[0.27, 6.55]	0.47	0.55	[0.04, 4.78]
Current Charge									
Property crime ^a	2.07	1.34	[0.58, 7.40]	1.88	1.22	[0.52, 6.73]	1.18	1.03	[0.22, 6.51]
Drug crime ^a	1.94	2.34	[0.18, 20.78]	1.93	2.30	[0.19, 19.93]	1.73	3.32	[0.03, 74.99]
Crime against a person ^a	8.62**	8.08	[1.37, 54.16]	7.29**	6.56	[1.25, 42.54]	8.49**	9.10	[1.03, 69.43]
Other charge ^a	1.72	1.18	[0.45, 6.60]	1.46	0.96	[0.40, 5.31]	1.20	1.13	[0.19, 7.60]
<i>SAVRY Measures</i>									
SAVRY Violence Risk ^c									
Moderate Risk ^a	1.33	0.69	[0.48, 3.71]						
High Risk ^a	1.99	1.35	[0.53, 7.51]						
Protective Factors Present ^a				0.67	0.30	[0.28, 1.60]			
Prosocial Involvement ^a							0.01*	0.01	[0.00, 0.22]
Strong Social Support ^a							1.37	1.06	[0.30, 6.22]
Strong Attachments ^a							0.37	0.24	[0.10, 1.30]
Positive Intervention Attitude ^a							9.02	15.69	[0.30, 273.00]
Strong School Commitment ^a							0.34	0.36	[0.04, 2.76]
Resilient Personality Traits ^a							2.96	3.00	[0.40, 21.60]
<i>PrediCT Measure</i>									
PrediCT Classification ^c									
Tier III Classification ^a	5.67	7.26	[0.46, 69.84]	5.84	7.55	[0.46, 73.66]	8.39	13.01	[0.40, 175.37]
Tier IV Classification ^a	27.85*	35.39	[2.31, 336.24]	24.95*	31.98	[2.02, 307.57]	51.41*	79.61	[2.47, 1069.62]
Tier V Classification ^a	60.52*	77.79	[4.87, 751.67]	57.09*	74.23	[4.46, 730.01]	75.73*	117.12	[3.65, 1569.39]

Note: * = p < .01. ** = p < .05. ^a Dichotomous variable ranging from 0 to 1. ^b Variable ranges from 13 to 19. ^c Risk assessment. SAVRY= Structured Interview of Violence Risk in Youth. PrediCT= Prospective Risk Evaluation for Delinquency in Connecticut.

Appendix D. Outcome Evaluation Methodology

Dataset. Data were provided on 354 unique stays in REGIONS. For 32 stays, information was missing on the client's ID and admission dates, both of which were needed to look up recidivism data. Therefore, the 32 stays were removed, resulting in data on 322 stays in REGIONS from 2018 to 2021. Some of these stays were multiple REGIONS stays for a single youth (i.e., they were admitted to REGIONS more than once). To reduce the impact that youths with multiple REGIONS stays may have on outcomes, only the first stay for each youth was selected, which changed the unit of analysis from stays in REGIONS to youths in REGIONS, as is fitting for an outcome analysis on recidivism. This change in the unit of analysis produced a REGIONS sample of 170 youths eligible to be matched.

Comparison Group. To develop a proper comparison group, data from youths who were placed on probation supervision during the same period of observation but did not attend REGIONS were requested. Data were provided to the research team on 757 probation cases. Inspection of these data revealed that 36 cases had been coded as receiving a program code for REGIONS. These 36 cases were removed. Next, data inspection of the remaining 721 cases demonstrated multiple youths were on probation more than once. To reduce the probability of youths being selected for the sample more than once, only the first supervision episode was kept in the data set. This resulted in a reduction in cases, putting the probation group sample size at $n = 650$. Finally, two cases were removed from the analysis because they contained racial categories not represented in the REGIONS dataset (and thus would not be able to be matched).¹ The final sample size of probationers eligible for selection into the control group was $n = 648$.

Outcome studies evaluate the impact of an intervention on a group exposed to the intervention relative to a group who was not exposed to the intervention. The gold standard for outcome studies is a random-controlled experiment, which was not feasible given the nature of the present evaluation and limitations on resources. The next best approach is post-hoc matching.

Post-hoc matching involves matching a treatment group of youths (i.e., REGIONS) to a comparison group of similar youths who did not receive the intervention (i.e., probation) on key variables that can impact the outcome (i.e., recidivism). One method of accomplishing this matching is propensity score matching, where cases are assigned a "propensity score" based on their probability of being assigned to treatment. This technique was not used for the REGIONS outcome evaluation because recent research has questioned the technique's ability to develop balanced and unbiased control groups (King and Nielsen, 2019).

Another method used to develop comparison groups is case-control matching. This technique selects a comparison group by matching exactly on variables of interest. For example, a male, high risk, 16-year-old in the treatment group would be matched to a male, high risk, 16-year-old in the comparison group. While this method is preferable for creating identical groups, it also requires a very large number of control group eligible cases. As noted above, data were available on 648 eligible probationers to be matched to 170 REGIONS cases. Due to the small number of probation cases relative to the number of REGIONS cases, case-control matching was not a viable solution to achieve a balanced, unbiased comparison group.

¹ Probation youth had two additional racial categories beyond Black, White, and Unknown. One youth was labeled as American Indian/Alaskan Native and one youth was labeled as Asian. These two cases were removed because their racial categories were not available for matching in the REGIONS youth.

Therefore, coarsened exact matching (CEM) was used (Iacus, King, and Porro, 2012). CEM is a statistical technique used to improve the comparability of treatment and control groups and is particularly useful for categorical variables (e.g., risk, gender, race). CEM aims to reduce bias by creating groups with similar observed characteristics, making it easier to estimate causal effects. The first step is coarsening. In this step, continuous variables (e.g., age) are discretized (categorized), and categorical variables may be collapsed or combined into fewer categories. The goal of coarsening is to reduce the dimensionality of the data and create more homogeneous groups based on observable characteristics. This process helps simplify the matching process and reduces the risk of overfitting the data. The next step is to match the data. The objective is to pair treatment and control group cases with similar coarsened characteristics. The matching process in CEM ensures that units with similar coarsened characteristics are compared, which helps to minimize confounding factors and improve causal inference. After matching is completed, statistical tests are used to evaluate the balance between the treatment and control groups.

For the REGIONS outcome evaluation, CEM was preferred over case-control matching owing to the limited number of probation cases available to be matched relative to the size of the number of REGIONS youths available for matching. Furthermore, the CEM matching process prioritizes exact matching, but not at the expense of overfitting data (i.e., creating models that are too complex and capture random noise rather than patterns of relationships). Coarsened data are placed into strata with the same coarsened values; exact matches are selected into the sample, and imbalances (cases too dissimilar for matching) are removed from the sample. Thus, depending on the nature of the data, not all cases may be selected for the treatment or control conditions, to ensure that groups remain balanced and that data do not overfit the statistical model (Iacus et al., 2012).

Appendix D. References

- Iacus, Stefano M., Gary King, and Giuseppe Porro. 2012. "Causal Inference without Balance Checking: Coarsened Exact Matching." *Political Analysis* 20(1):1–24.
- King, Gary, and Richard Nielsen. 2019. "Why Propensity Scores Should Not Be Used for Matching." *Political Analysis* 27(4):435–454.

Appendix E. Acronyms and Initialisms

Acronyms	Meaning
ACES	Adverse Childhood Experiences Scale
AFIR	Adolescent Female Intermediate Residential
AMIR	Adolescent Male Intermediate Residential
APRN	Advanced Practice Nurse
AWOL	Absent Without Official Leave
BGV	Boys and Girls Village
CBT	Cognitive behavioral therapy
CC	Clinical Coordinator
CDCS	Contractor Data Collection System
CEU	Continuing Education Units
CJR	Connecticut Junior Republic
CMIS	Case Management Information System
CPA	Community Partners in Action
CPO	Classification and Program Officers
CQI	Continuous Quality Improvement
CRAFFT	Car, Relax, Alone, Forget, Friends, Trouble (health screening tool designed to identify substance use, substance-related riding/driving risk, and substance use disorder in adolescents)
CROPS	The Child Report of Posttraumatic Symptoms
CSSRS	Columbia Suicide Severity Rating Scale
DBT	Dialectical Behavior Therapy
DCF	Department of Children and Families
DSG	Development Services Group, Inc.
HAMILTON	Helping Adolescent Males in Learning Their Options Now
ITP	Integrated Treatment Plan
JBCSSD/CSSD	Judicial Branch Court Support Services Division
JDO	Juvenile Detention Officers
L.I.S.T	The Learning Inventory Skill Training
LCSW	Licensed Clinical Social Worker
LEP	Limited English Proficiency
LMFT	Licensed Marriage and Family Therapist
LMHCs	Licensed Mental Health Counselor
LMS	Learning Management System
LPC	Licensed Professional Counselor
LYNC	Linking Youth to Natural Communities
MAYSI	Massachusetts Adolescent and Youth Screening Instrument
MDT	Multidisciplinary Team
MET	Motivational Enhancement Therapy
MOU	Memorandum of Understanding
MST-EA	Multisystemic Therapy for Emerging Adults
MST-FIT	Multisystemic Therapy: Family Integrated Transitions

*JBCSSD REGIONS Juvenile Justice Process and Outcome Evaluation
Appendix E. Acronyms and Initialisms*

MYI	Manson Youth Institution
NHBOE	New Haven Board of Education
NHFA	New Haven Family Alliance
OSHA	Occupational Safety and Health Administration
PAYA	Preparing Adolescents for Youth Adulthood
PbS	Performance-based Standards
PDS	Pre-dispositional Study
PESQ	Personal Experience Screening Questionnaire
PO	Probation Officer
PrediCT	Probation Risk Assessment (Prospective Risk Evaluation for Delinquency in Connecticut)
PTSD	Post-Traumatic Stress Disorder
PWP	Probation with Residential Placement
QA	Question/Answer
REGIONS	Re-Entry, Goal-oriented, Individualized, Opportunity to Nurture Success
RFP	Request for Proposal
RSTI(TA)	Risk-Sophistication-Treatment Inventory Treatment Amenability Scale
SAVRY	Structured Assessment of Violence in Youth
SMART	Specific, Measurable, Achievable, Relevant, and Time-bound
START:AV	Short-Term Assessment for Risk and Treatability: Adolescent Version
STOP	Stop, Take a step back, Observe, Proceed mindfully (DBT tool)
STRESS	Structured Trauma-Related Experiences & Symptoms Screener
TCU CEST	Texas Christian University Client Evaluation of Self at Treatment
TIPS	Temperature, Intense Exercise, Paced Breathing (DBT Tool)
TRAC/Tracc	Therapeutic Respite and Assessment Center
URICA	University of Rhode Island Change Assessment
VAK	Visual/Auditory/Kinesthetic
VARK	Visual/Auditory/Read–Write/Kinesthetic
YAP	Youth Advocate Programs