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Solutions For Justice Professionals

With goals to safely manage the offender population, justice professionals are tasked with responding to the risk and needs of individuals.

The RNR Simulation Tool is designed to help corrections and treatment agencies meet demands to be responsive to the needs and risks of individuals in the justice system. Increasing responsivity is needed to reduce the risk of future offending.

Decision-support tools were funded by the Center for Advancing Correctional Excellence (ACE!) at George Mason University, the Bureau of Justice Assistance (2009-DG-BX-K026), the Substance Abuse and Mental Health Services Administration (202171), and The Public Welfare Foundation.

The Risk-Need-Responsivity Simulation Tool

For people involved in the criminal justice system, evidence-based practice (EBP) and treatments emphasize that assessment and programming should target criminal justice, criminogenic need, and other behavioral issues. The notion is that individual outcomes can be improved by assessing for a number of related and often overlapping dimensions such as offending (e.g. criminal history risk), needs (e.g. antisocial peers, antisocial cognitions, antisocial values/thinking) and behavioral health factors (e.g. substance use, mental health, trauma). This evidence-based practice is referred to as the Risk-Need-Responsivity (RNR) Model (Andrews and Bonta, 2010; Caudy et al., 2013).

Another component of the EBP model is the nature of the programs and interventions offered to individuals. Effective programs must be able to address the criminal justice, behavioral health, and criminogenic needs of individuals to achieve positive results.

The RNR framework focuses on improving outcomes by encouraging the justice system to respond to its clients in a manner that is likely to yield better outcomes. While effective *programs* can reduce recidivism for *individual* offenders, effective *systems* can reduce recidivism for *populations* of offenders (Bhati & Roman, 2010; Caudy et al., 2013). This requires individual assessments to pay particular attention to a broader range of factors that directly relate to individuals' risk for

reoffending and prioritize these needs for targeted treatment. It also requires practitioners to implement programs that target certain profiles of offenders with specific needs. The RNR framework reinforces the need for jurisdictions to have a range of effective, well-implemented programs that target the varying needs of the justice-involved population. It is important to address gaps in services to develop responsive programs and ultimately, a responsive system.

This web-based decision-support system—the RNR Simulation Tool—was developed to help jurisdictions and providers implement the RNR framework. The system assists justice and behavioral health agencies (government, private, or non-profit) who wish to translate EBPs into practice. This approach integrates the science around effective screening, assessment, programs, and treatment matching (responsivity) to improve individual and system outcomes. To that end, the RNR Simulation Tool has three portals: 1) RNR Program Tool for Adults; 2) Assess an Individual; and 3) Assess Jurisdiction's Capacity.

This document provides users with general information about each portal and the intended uses. Please email rnrtool@gmu.edu for more specific information or to answer any questions about the tool. The RNR Simulation Tool is available online at: <http://www.gmuace.org/tools/>



Three Easy-to-Use Web Portals

RNR PROGRAM TOOL FOR ADULTS

This 30-minute program assessment tool examines the content, quality, dosage, and other factors of services/treatments/controls offered for justice-involved individuals. Jurisdiction administrators or program managers simply input information about a specific program offered and the tool provides detailed feedback indicating what risk-need profiles the program is best suited to meet. The portal also rates the program's overall quality according to the RNR principles and core correctional practice. When applicable, the tool provides recommendations for how program administrators can refine the program to better achieve responsivity and improve outcomes. The three main goals of the program tool are: 1) to classify programs to facilitate treatment matching, 2) to explore how programs currently target the risk level and criminogenic needs of their clients, and 3) to assess programs on their use of evidence-based practices. The tool is intended to help agencies better understand the resources available to them and to foster responsivity at a system level.

ASSESS AN INDIVIDUAL

The Assess an Individual portal emphasizes using data from criminal justice and behavioral health screenings and assessments to determine the most effective type of program and controls to reduce individual recidivism. This portal can be used with a jurisdiction's instruments, by itself, or in combination with other tools. Designed for line staff, users are asked to answer 17 questions about individual offenders' risk, needs, and lifestyle factors. The system then provides a recommendation regarding the type of program that would best fit the individual and lead to the greatest recidivism reductions. If certain information is not available, the RNR Simulation Tool will rely upon its underlying database of offender risk-need profiles to estimate likely attributes based on the prevalence of each attribute in the national population. Users can integrate jurisdiction-specific data regarding the prevalence of individual attributes to produce customized feedback. This portal also estimates a percent reduction in recidivism that one might expect if the offender is matched to the level of programming that is consistent with their unique needs (i.e., a program of best fit).

ASSESS JURISDICTION'S CAPACITY

The Assess Jurisdiction's Capacity portal uses inputted information to assess a jurisdiction's capacity to be responsive to the risk-need profiles of individuals in its jurisdiction. Based on data from 18 questions about the prevalence of risk and needs of individuals in the jurisdiction, the portal provides an initial recommendation of the amount and type of programming needed to adequately respond to the jurisdiction's population. When users enter information regarding the available programs in a jurisdiction, the portal also identifies system-level gaps in the jurisdiction's capacity to provide responsivity and recommends levels of programming the jurisdiction may need to augment in order to better respond to the needs of their population.

EYE ON IT

The latest on evidence-based programming.

While there is no magic program that will work for every offender every time (Lipsey & Cullen, 2007), recent meta-analytic research indicates that certain correctional treatments tend to be more effective than others. Programs showing some of the largest reductions in offending include Cognitive-Behavioral Therapy (CBT), Medically-Assisted Treatment (MAT), Drug Courts, and Therapeutic Communities (TCs) (see Caudy et al., 2013).

The RNR Simulation Tool relies on these types of evidence to provide feedback to users. The RNR Program Tool for Adults portal allows users to enter information for each program or service they offer, whether it exists as a separate program or within a justice setting. The tool also includes the latest in implementation knowledge to assist programs with determining the degree to which their program adheres to the RNR model.

The RNR Program Tool For Adults



Assess your current programs based on treatment offered, content, quality, and other factors.

The **RNR Program Tool for Adults** portal uses program-specific information to categorize programs into six different program groups. Each group has a different target area that reflects the program's focus to address offending behaviors.

Q: What are some essential features of effective correctional programs?

A. There are many different factors that can impact the effectiveness of a program including risk, needs, responsiveness, implementation, dosage, and restrictiveness. Programs with good adherence to each of these key features tend to have better outcomes. The key is what

| | |
|---------|---|
| GROUP A | • Severe Substance Use Disorders |
| GROUP B | • Criminal Thinking/Cognitive Restructuring |
| GROUP C | • Self Improvement & Management |
| GROUP D | • Interpersonal Skills |
| GROUP E | • Life Skills |
| GROUP F | • Punishment Only |

Primary Targets of RNR Program Groups

criminogenic behaviors the program addresses and the different cognitive and behavioral tools used to assist individuals in changing these behaviors. The RNR Program Tool for Adults provides users with feedback and scores on the essential features of programs to allow users to understand a program's strengths and

areas where it can be improved. The tool also provides examples of high-quality programs to guide improvements. Program managers can use overall program ratings or scores on essential features to work with justice agencies to maximize exposure to effective programs.

High-Quality Programs:

- Use cognitive behavioral therapy (CBT) and social learning interventions that focus on assisting with restructuring prosocial thinking;
- Offer programs that adhere to a core model, use an evidence-based treatment curriculum, and have staff that are skilled in service delivery;
- Manage dosage and intensity of interventions based on criminal justice risk factors, criminogenic needs, and behavioral health needs;
- Identify a primary target for cognitive interventions (e.g. severe substance use, criminal thinking);
- Collaborate with justice agencies to ensure that controls are integrated into treatment programming;
- Create an environment where individuals can improve by emphasizing motivation to change and building commitment to treatment; and
- Provide feedback to individual participants in programs to ensure long-term success.

Adapted from Smith, Gendreau, & Swartz (2002).

Classifying Programs to Guide Responsivity and Outcomes

Example of the RNR Program Tool for Adults Feedback Report for a Reentry Program

Below is a sample feedback report from the RNR Program Tool for Adults portal for a jail-based program that primarily targets criminal thinking. The feedback includes a summary of program components and scores in each of the six scoring areas as well as suggestions for improvement where applicable.

RISK: 100%

- Program targets moderate- to high-risk offenders.
- Program uses a validated risk-needs instrument.

NEED: 100%

- Program targets criminal thinking including antisocial thinking, criminal peers, and self-control.
- Program uses target-specific assessment criteria or instrument to determine eligibility.

RESPONSIVITY: 100%

- Research indicates the primary modality used in the program is effective (CBT, specifically the *Thinking for a Change* curriculum).
- The program uses both rewards and sanctions.
- The program is available for specific offender populations (e.g. offenders who are 18-30 years old).

IMPLEMENTATION: 56%

- Program requires attendance at a minimum of 75% of sessions for successful completion.
- All program staff have at least a bachelor's degree and prior experience delivering the *Thinking for a Change* curriculum.
- Program staff regularly communicate with supervision staff about participants' progress.
- Program has been externally evaluated.
- Program uses *Thinking for a Change* manual to guide implementation.
- Program uses trained supervisors to coach staff on questions that arise during the course of instruction.
- Program has an internal team that monitors quality assurance.

To Improve Implementation Score:

- Change program completion criteria to successful completion of all required services.
- Integrate staff who have advanced degrees (e.g., MASW, LCSW, PhD).

DOSAGE: 40%

- Program provides approximately 180 hours of treatment to participants.
- Treatment is spread across 13 to 17 weeks.
- Services are provided on a daily basis, for approximately 10 to 14 hours per week.

To Improve Dosage Score:

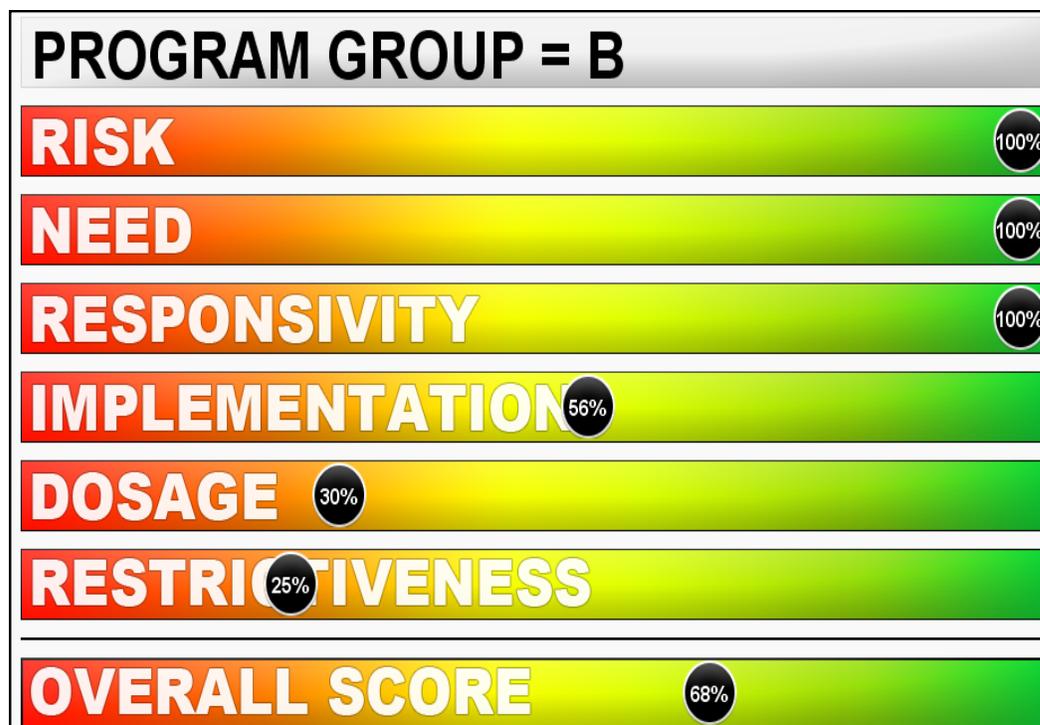
- Increase dosage to provide 200+ hours of direct treatment to participants.
- Extend program length to deliver services for 26+ weeks.
- Increase program hours to 15+ hours per week or 3+ hours per day.
- Offer program in phases and include aftercare.

RESTRICTIVENESS: 25%

- Program includes a number of complementary programming including: contingency management, psycho-social education, alcohol or drug education, moral reasoning, relapse prevention, and motivational interviewing.
- Program is located in a criminal justice facility (local jail).

To Improve Restrictiveness Score:

- Increase participation in other programs to complement the *Thinking for a Change* curriculum.
- Include drug testing.



Assess An Individual



Assess offenders or estimate the reduction in recidivism by matching individuals to treatment programs.

Finding the Right Programs for Justice-Involved Individuals

USING RISK AND NEED INFORMATION TO IMPROVE RESPONSIVITY AND REDUCE OFFENDING.

The **Assess an Individual** portal of the RNR Simulation Tool assists users in selecting appropriate controls and treatment for individuals based on individual risk and need factors.

Q: What type of programming would this individual benefit from?

A. The first step in matching offenders to appropriate programming groups is to identify their risk of recidivism and criminogenic needs. Risk information includes criminal history, age at first arrest, prior terms of probation or incarceration, and violations. Needs information refers to factors that influence an individual's current situation, such as substance use, mental health, employment, associates, and criminal thinking. Often, this information can be obtained from a jurisdiction's validated risk and need assessment instrument. Certain information (e.g. substance use severity and mental health) may require additional assessment. To determine what programming would most benefit an individual, agencies should prioritize individuals' needs to ensure that criminogenic needs (those related to offending behaviors) receive immediate treatment.

Review case information with offenders to build an understanding of risk and to reinforce strengths.

Q: What if the type of program recommended is not available?

A. The Assess an Individual portal provides three recommendations of programming for each individual. The "best fit" programming recommendation will result in the highest recidivism reduction. The tool also provides second- and third-best fitting program recommendations. For each program recommendation made, the model also provides estimated reduced recidivism rates based on completion of a program. Users should keep in mind that the highest recidivism reductions will result from the best fitting programs.

Q: Does the tool consider individual strengths?

A. The RNR Simulation Tool assesses individual strengths to recognize the positive factors in individuals' lives. Strengths include education, housing stability, employment, financial stability, and prosocial supports. These positive factors act as important stabilizers to help a person successfully complete supervision and treatment, and take positive steps in their lives. Reviewing the risk and need profile with an individual builds their knowledge and understanding of their own needs and helps strengthen commitment to address these factors.

THE CASE OF THE MODERATE-RISK OFFENDER

Moderate-risk offenders may pose a special challenge for justice professionals. While they tend to have shorter criminal histories than higher-risk offenders, they may also have a number of criminogenic needs and destabilizing factors which contribute to the risk of reoffending.

For example, a young adult with few prior arrests, but who uses heroin, may be classified as moderate-risk despite having a severe substance use disorder. It is important to assess criminogenic needs in addition to risk to determine factors linked to offending behaviors.

In responding to moderate-risk offenders, interventions should emphasize their criminogenic needs. Often such individuals do not need the same level of supervision controls placed on them. However, they may still benefit from evidence-based programming to help reduce their needs and build stabilizers in their lives.

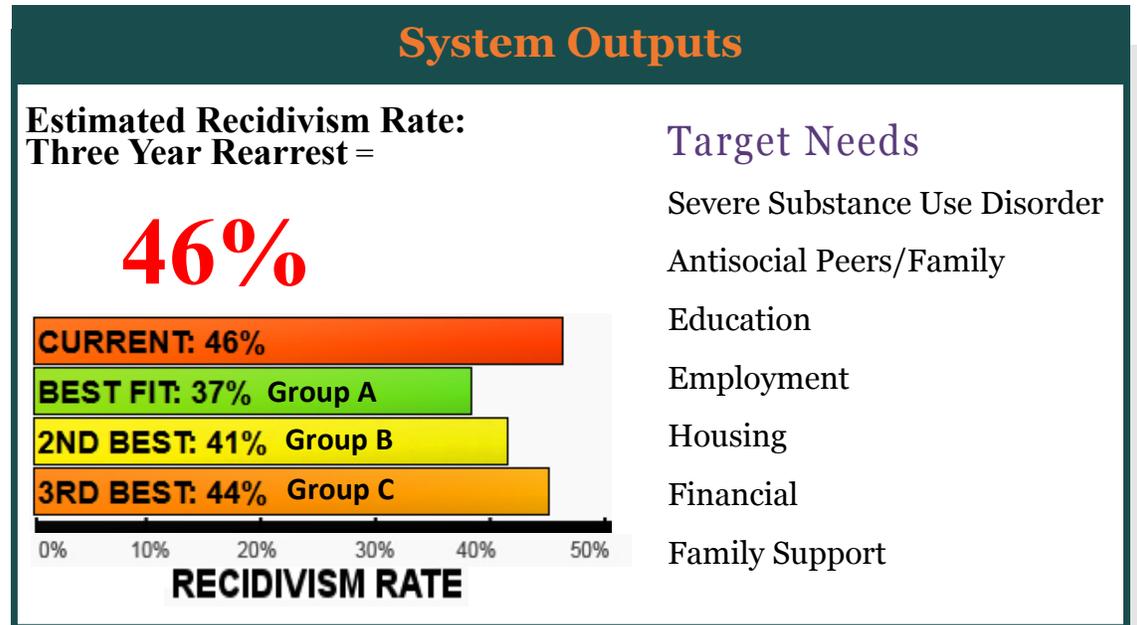
Example of the RNR Simulation Tool Individual Assessment

AN OFFENDER WITH A SEVERE SUBSTANCE USE DISORDER:

Jessica is a 39-year-old female offender on probation for possession of cocaine. She is a moderate-risk offender with a DSM-V classification of a severe substance use disorder for cocaine. She does not display any patterns of criminal thinking, nor does she have any mental illness. She has someone she can depend on for emotional support. She does not have a high school diploma, and is not employed. She regularly depends on public shelters and has many financial difficulties. She also has a number of friends that are criminally active. Her environment does not promote a drug- and crime-free lifestyle.

Best Fit Program: Group A

Interventions Targeting Severe Substance Use Disorders



The RNR Assess an Individual portal estimates that an individual like Jessica has a 46% chance of being rearrested within three years. Although she is only moderate-risk, given her severe substance use disorder the tool recommends that a program in Group A would be the “best fit” for her and result in the greatest reduction in recidivism by treating her severe substance use disorder. As indicated, the system estimates Jessica’s likelihood of being arrested within three years can be reduced to 37% if she successfully completes a Group A program. In the event that such a program is not available, the system also provides second– and third-best fitting program recommendations. Since Jessica is a female offender, a Group A program that targets females may provide increased responsivity.

Jessica is a moderate-risk offender with a primary need of substance use. It is important to target this primary need for treatment to elicit the largest recidivism reduction.

PROGRAM GROUP A - SEVERE SUBSTANCE USE DISORDERS

Group A programs address severe drug use disorders for drugs such as opiates, opioids, amphetamines, methamphetamine, crack/cocaine, heroin, PCP, benzodiazepines, and barbiturates. Programs use specific modalities designed to address severe use, offer a range of dosage levels across a continuum of care, and adhere to an evidence-based treatment manual. Examples may include residential drug treatment, therapeutic communities, specialty courts, or intensive outpatient treatment.

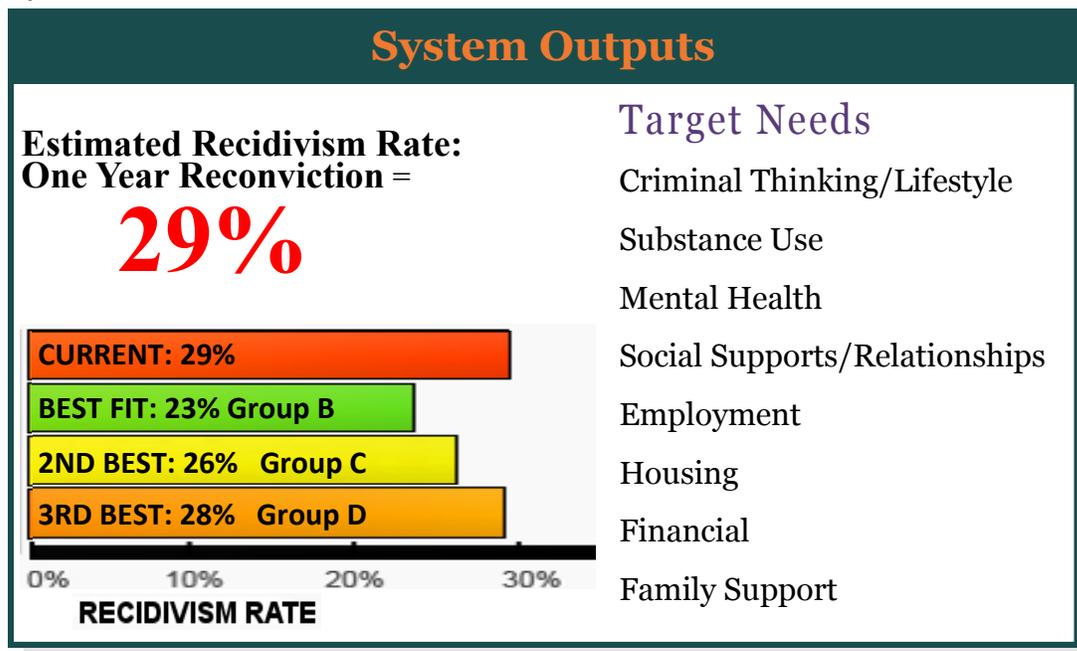
AN OFFENDER WITH CRIMINAL THINKING:

Connor is a 30-year-old male who was just released from jail. He served a sentence for breaking and entering (general offender). He has a long criminal history (both juvenile and adult) and is a high-risk offender with criminal thinking patterns. He meets DSM-V criteria for a severe substance use disorder for marijuana and is schizophrenic. He says that he has no one he can count on for emotional or social support. He graduated from high school, but he does not currently have a job. He often sleeps at his friends' houses and occasionally will stay at a shelter. He uses his money to buy marijuana and often has trouble meeting his fi-

nancial obligations. His friends are not criminally involved, but his environment is not supportive of a drug- and crime-free lifestyle.

Best Fit Program: Group B

Prioritize Treatment to Address Criminal Thinking and Co-Occurring Substance Use



The RNR Assess an Individual portal estimates that an individual like Connor has a 29% chance of being reconvicted within one year. Given his criminal thinking/lifestyle and other risk and need factors the tool recommends that a program in Group B would be the “best fit” for him and result in the greatest recidivism reduction. As indicated, the system estimates that Connor’s likelihood of recidivism can be reduced to 23% if he successfully completes a Group B program that targets his criminal thinking. In the event a Group B program is not available, second- and third-best fitting program recommendations are also provided.

Connor is a high-risk offender with a primary need of criminal thinking. He also has co-occurring substance use disorder and mental illness. Treatment should be prioritized to target criminal thinking while also working to stabilize his substance use and mental illness.

PROGRAM GROUP B - CRIMINAL THINKING

Group B programs focus on criminal thinking using cognitive restructuring techniques, but also include interpersonal and social skills interventions. These programs predominantly target high and moderate-risk offenders, have a higher dosage of clinical hours, and are implemented with a curriculum. Interventions in this group should include components that can address the primary treatment target as well as other potential treatment targets (e.g., self-improvement and management, social skills, and life skills). Examples may include cognitive-based criminal thinking curriculums, therapeutic communities, behavioral interventions, and intensive supervision paired with treatment to change criminal thinking patterns.

Building a Responsive System

CLOSING THE GAP BETWEEN RISK-NEED PROFILES AND AVAILABLE SERVICES

The **Assess Jurisdiction's Capacity** portal uses population-level data to assess a jurisdiction's capacity to provide responsiveness. Based on inputted data about the prevalence of aggregate risk and needs in a jurisdiction, the tool will recommend the type and quantity of services that would best match the needs of that jurisdiction. For maximum responsiveness, we recommend jurisdictions use this portal in

conjunction with the RNR Program Tool for Adults portal.

Q: How can my jurisdiction keep track of what programs we have available?

A. The RNR Simulation Tool offers a unique opportunity for program administrators to enter and save information about the programs they have available in their jurisdiction. Other site users can then view the

available programs, including the programs' intended targets (e.g., substance use, criminal thinking), to guide responsiveness and effectively match offenders to available programs.

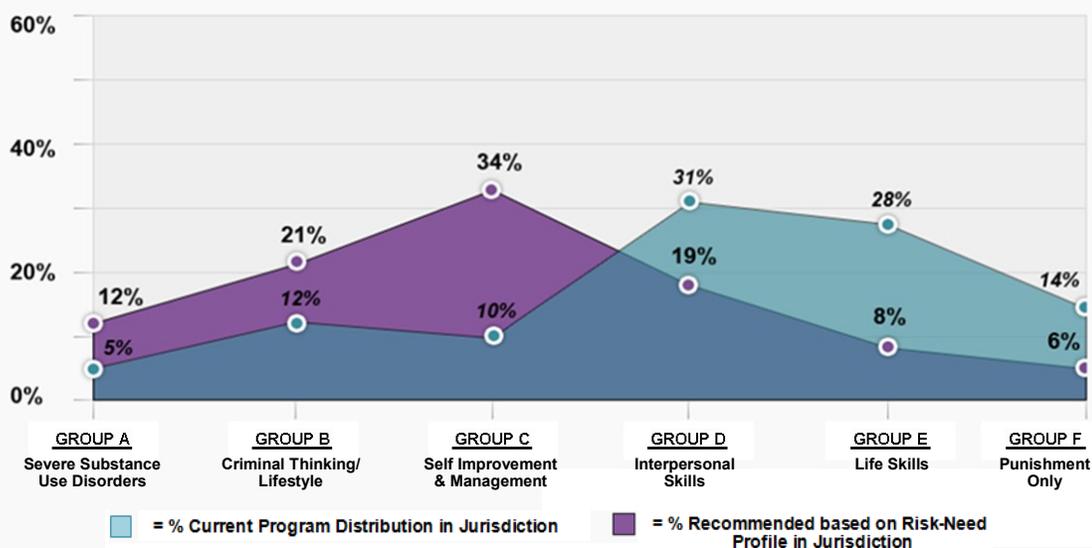
Q: How can the RNR Simulation Tool help my jurisdiction prepare for changes associated with the Affordable Care Act (ACA)?

A. The RNR Simulation Tool will assist justice professionals in preparing for

and responding to the expected influx in offender populations who will require access to behavioral health treatment services under the Affordable Care Act. The tool enables jurisdictions to classify their programs based on offender needs and helps determine if adequate programming exists to accommodate the offender population. Where sufficient programming is lacking, the portal provides recommendations to fill the treatment gap.

Assess Jurisdiction's Capacity

Use client population data & current programming to identify programs that meet your population's needs.



Example of Treatment Gap Output for a Jurisdiction

The **Assess Jurisdiction's Capacity Portal** provides a graphical representation of the match between a jurisdiction's actual program capacity and the programming capacity recommended by the RNR Simulation Tool.

Example: Reducing Recidivism through System-Wide Responsivity

Jurisdiction A serves over 35,000 justice-involved individuals with community-based substance abuse and mental health treatments. Fifty-five percent of the population is high risk, 26% is moderate risk, and 19% is low risk.

The individuals in this jurisdiction also have varying substance use disorders. Thirteen percent of the population meets DSM-V criteria for severe substance use disorder on a criminogenic drug, 32%

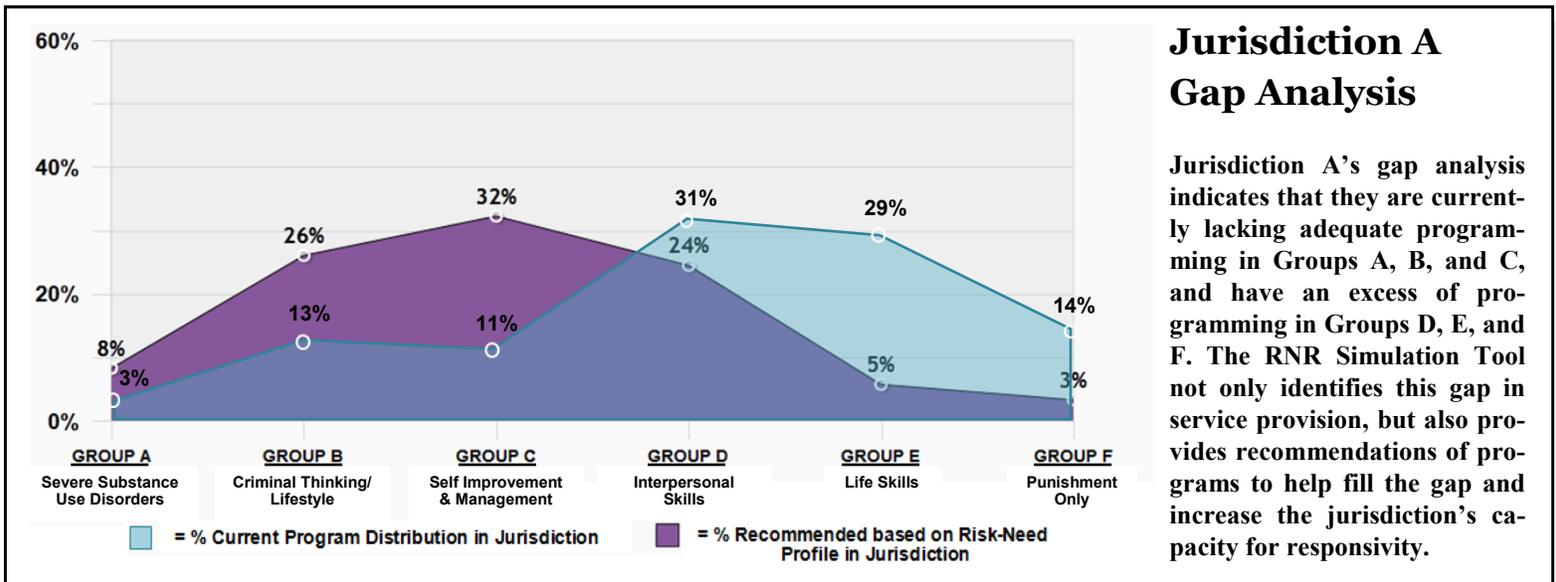
has a severe substance use disorder for marijuana or alcohol, 38% has a mild to moderate substance use disorder for a non-criminogenic drug, and 17% of the population does not meet DSM-V criteria for a substance use disorder. The population is also characterized by a number of other dynamic needs, with 68% of the population in need of employment assistance, 54% in need of educational services, 2% in need of housing assistance, and 41% in need of a com-

bination of two or more services.

The RNR Simulation Tool performed a gap analysis to determine if treatment needs are being met by the programs in this jurisdiction. This gap analysis revealed that despite the availability of programming, a gap exists for services which target severe substance use disorders. At the same time, there is an excess of programming that targets interpersonal skill development (Group D),

Life Skills Development (Group E), and Punishment Only (Group F).

Administrators can use this information to build the capacity of their system to provide appropriately targeted treatment to meet the needs of their offender population. This should help reduce offender needs, reduce individuals' risk of recidivism, and increase public safety.



REFERENCES

Andrews, D. A., & Bonta, J. (2010). *The Psychology of Criminal Conduct*, (5th ed.). Anderson.

Caudy, M., Tang, L., Ainsworth, S. A., Lerch, J., & Taxman, F. S. (2013). Reducing recidivism through correctional programming: Using meta-analyses to inform the RNR Simulation Tool. In F. S. Taxman & A. Pattavina (Eds.), *Simulation Strategies to Reduce Recidivism: Risk Need Responsivity (RNR) Modeling in the Criminal Justice System*. Springer.

Lipsey, M. W., & Cullen, F. T. (2007). The effectiveness of correctional rehabilitation: A review of systematic reviews. *Annual Review of Law and Social Science*, 3, 297–320.

Lowenkamp, C. T., Latessa, E. J., & Holsinger, A. M. (2006). The risk principle in action: What have we learned from 13,676 offenders and 97 correctional programs? *Crime & Delinquency*, 52(1), 77–93.

Smith, P., Gendreau, P., & Swartz, K. (2009). Validating the principles of effective intervention: A systematic review of the contributions of meta-analysis in the field of corrections. *Victims & Offenders*, 4(2), 148.

Taxman, F. (2006). Assessment with a flair: Accountability in supervision plans. *Fed. Probation*, 70, 2.

Taxman, F. S., & Marlowe, D. (2006). Risk, needs, responsivity: In action or inaction? *Crime & Delinquency*, 52(1), 3–6.

The RNR Simulation Tool is part of a larger suite of web-based translational tools for practitioners. The CJ-TRAK Knowledge Translation Tool Suite is also home to SOARING 2, an eLearning software package to train community corrections officers in evidence-based practices, and EMTAP, a synopsis of research findings in corrections and related fields. For more information on these or other ACE! projects, please contact ace@gmu.edu.

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Evidence Mapping
Assess an Individual
The RNR Program Tool
Assess Jurisdiction's Capacity
SOARING 2

Welcome to the CJ-TRAK Knowledge Translation Tool Suite

Assess An Individual



Assess offenders or estimate the reduction in recidivism by matching individuals to treatment programs.

LAUNCH

The RNR Program Tool



Assess your current programs based on treatment offered, content, quality, and other factors.

LAUNCH

Assess Jurisdiction's Capacity



Use client population data & current programming to identify programs that meet your population's needs.

LAUNCH

SOARING2



A suite of tools to help learn about the EBP concepts.

LAUNCH

Evidence Mapping



View synthesized data from meta analyses and systematic reviews on what works in corrections and health.

LAUNCH

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