



Center for Advancing Correctional Excellence!

CRIMINOLOGY, LAW, & SOCIETY, GEORGE MASON UNIVERSITY



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Risk-Needs-Responsivity (RNR) Simulation Tool

The evidence-based practices (EBP) framework emphasizes that justice agencies should match offenders to services and programs based on their risk and need factors ("the RNR Principles"). The effective use of the RNR principles is challenging to implement because:

- 1) The available services for offenders in the community are often not consistent with risk and needs of offenders; and
- 2) Competing issues exist that make it difficult for policy makers to consider how best to simultaneously manage the offender in the community, ensure public safety, contain or reduce costs, and reduce individual offender recidivism.

This project, funded by the Bureau of Justice Assistance, the Substance Abuse and Mental Health Services Administration, and the Public Welfare Foundation, has developed a RNR Simulation Tool to assist local, state, and/or federal agencies in using the risk-need-responsivity approach in practice. The Center for Advancing Correctional Excellence (ACE!) at George Mason University developed these tools in collaboration with Jim Byrne and April Pattavina from the Department of Criminal Justice & Criminology at the University of Massachusetts, Lowell, and Avinash Bhati from Maxarth, LLC, with web support from Slonky, LLC.

This RNR Simulation Tool 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) Assess an Individual;
- 2) Assess a Program; and
- 3) Assess Jurisdiction's Capacity

The RNR Tool allows jurisdictions to modify the parameters of the model based on the unique features of their jurisdictions. It complements efforts to advance the use of EBPs by helping jurisdictions strategically review their existing correctional and treatment services and then make choices based on maximizing different outcomes (i.e., costs, offender change, and public safety) in their jurisdiction.

The RNR Simulation Tool also assists 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 (2014).

About Risk, Needs, and Responsivity

The risk-need-responsivity (RNR) principle theory was developed by Andrews and Bonta in 1990. It integrates the psychology of criminal conduct into an understanding of how to reduce recidivism (Andrews & Bonta, 1994). Using this concept, they identify three principles to guide the assessment and treatment of offenders to advance rehabilitative goals as well as reduce risk to society (from recidivistic crime) (Bonta, Andrews & Wormith, 2006).

- **The Risk Principle:** high- to moderate-risk individuals should be prioritized for more structured and more intensive treatment and control programs to maximize outcomes; low-risk individuals should be prioritized when they have high criminogenic needs.

- **The Need Principle:** changeable factors that drive involvement in offending (criminogenic needs) are assessed. Criminogenic needs are generally dynamic. Taking into account those factors related to recidivism, the RNR Simulation Tool identifies two central spectrums of needs (Drug Dependence and Criminal Lifestyle) for higher need individuals and lifestyle issues. Factors that affect psychosocial functioning such as mental health condition, housing stability, and educational attainment are important **stabilizers** and **destabilizers** and should be used to determine the level of need.

GROUP A	• Dependence on Hard Drugs
GROUP B	• Criminal Thinking/Cognitive Restructuring
GROUP C	• Self Improvement & Management
GROUP D	• Interpersonal Skills
GROUP E	• Life Skills
GROUP F	• Punishment Only

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CJ-TRAK HOMEPAGE

TEST DRIVE ASSESS AN INDIVIDUAL TOOL

TEST DRIVE THE RNR PROGRAM TOOL

TEST DRIVE ASSESS JURISDICTION'S CAPACITY TOOL

•**The Responsivity Principle:** the yield from programming is maximized when treatments and controls responsive to the risk and needs of individual offenders. The risk-need nexus, plus the degree of stabilizers in the person's life, should determine the target behaviors to address in programming. Demographics such as developmental factors (age) and gender should affect programming to yield the greatest outcomes. The domains of recommended programs are: drug dependency, criminal lifestyle, drug abuse and mental health needs, interpersonal skill development, life skill development, and punishment only. (Adapted from Andrews and Bonta, 2010).



Spotlight on Responsivity

General responsivity calls for the use of cognitive-behavioral approaches to treatment as such approaches have been shown to be most effective with offenders as a whole.

Specific responsivity, however, acknowledges that non-criminogenic needs may help or hinder the provision of and response to treatment, thus they need to be addressed in order to maximize recidivism reduction.

A major factor in achieving responsivity is the dosage or intensity of programming and controls. Higher risk and greater needs require more intensive interventions. To guide responsivity, the RNR Simulation Tool matches offenders to a level of programming and controls based on their risk level and criminogenic needs.

The concept of RNR is considered a best practice for corrections (Taxman, 2006) and has been shown to effectively reduce recidivism by as much as 35% when implemented in certain settings (Bonta & Andrews, 2007). Research has shown that non-adherence to the RNR principles in service delivery is not only ineffective, but can also be detrimental to offender treatment outcomes (Lowenkamp & Latessa, 2005). One study examining the effectiveness of treatment programs reported a substantial negative correlation ($r = -.28$) between risk level and treatment effect size for a program that did not adhere to the RNR principles (Bonta, Andrews & Wormith, 2006).

Why do we need a Risk-Need-Responsivity Tool?

- Reducing criminal behavior and improving public safety can best be achieved by matching offenders to services that are consistent with the behaviors that drive their criminal activity.
- The current distribution of treatment services to offenders in prison, jail and community corrections is inconsistent with the needs of the offender. Significant improvements in reducing recidivism cannot be made unless this gap in services is closed.
- There is a pressing need to help jurisdictions develop guidelines as to how to allocate offenders into appropriate services including what services need to exist.



The RNR Simulation Tool Portals

The RNR Simulation Tool consists of three easy to use portals. These portals are currently available through ACE!'s CJ-TRAK suite, a web-based compilation of translational tools for practitioners

1. **Asses an Individual/Estimate Recidivism Reduction:** 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).
2. **Rate Your Jurisdiction's Programs:** 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 criminal justice agencies better understand the resources available to them and to foster responsibility to specific risk-need profiles.


- 3. Assess Jurisdiction's Capacity/Estimate Recidivism Reduction:** 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 responsibility and recommends levels of programming the jurisdiction may need to augment in order to better respond to the needs of their population.


Products and Presentations

Coming Soon! Taxman, F., & Pattavina, A. (forthcoming). *Simulation Strategies to Reduce Recidivism: Risk Need Responsivity (RNR) Modeling in the Criminal Justice System*. Springer.

 [The Risk-Need-Responsivity Simulation Tool](#)

 [The Technical Background of the Risk, Need, Responsivity \(RNR\) Simulation Tool](#)

 [The RNR Simulation Tool: A Demonstration](#), Presented at the Bureau of Justice Assistance in December, 2012.

 ACE! Researcher Michael Caudy presented this poster at the Addiction Health Services Research Annual Conference in October, 2012. [Download poster here.](#)

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