

# *The RNR Simulation Tool: A Demonstration*

Center for Advancing Correctional Excellence (ACE!)  
George Mason University

BJA: 2009-DG-BX-K026; SAMHSA: 202171; Public Welfare Foundation



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# The Issues

- Too few justice-involved individuals exposed to evidence-based programs and services
- Too few justice-involved individuals matched to appropriate programs and services
- Insufficient planning tools to determine what type of programs and services are needed
- Justice culture not supportive of treatment



# Predicting Recidivism

- **Static Risk** – strongest predictors are: age, gender, and criminal history
  - Key components of risk prediction
  - Not amenable to change through intervention
- **Criminogenic Needs** – dynamic risk factors related to recidivism (e.g. substance dependence, criminal thinking, delinquent peers)
  - Focus on factors that drive criminal behavior
  - Beyond static risk
  - Identify targets for intervention



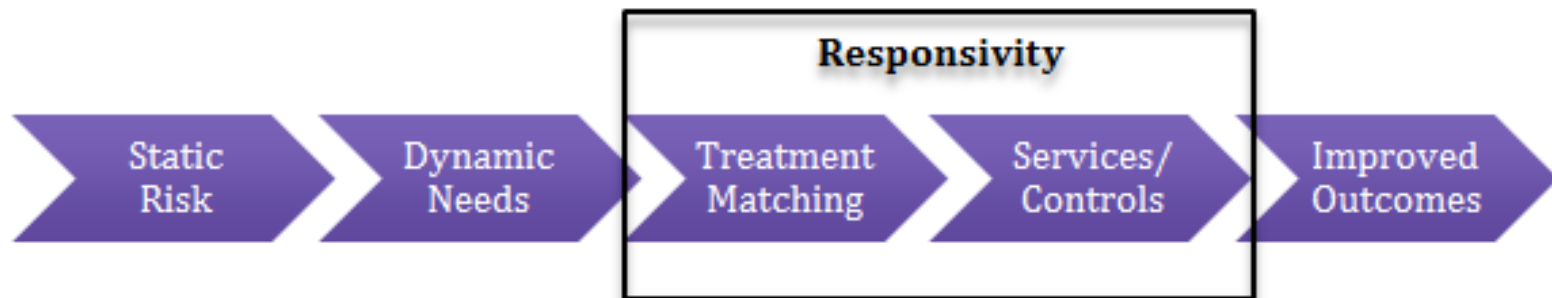
# Evidence-Based Practices (EBPs)

- Interventions/approaches for which there is consistent scientific evidence showing that they improve client outcomes (Drake et al., 2001)
  - Standardized risk and needs assessment; cognitive-behavioral treatment(s); therapeutic communities; drug courts; aftercare; graduated sanctions and incentives
- Adoption of EBPs is a big challenge
  - Need for knowledge translation and implementation
- *Efficacy* versus *Effectiveness*
  - Effectiveness requires real-world results



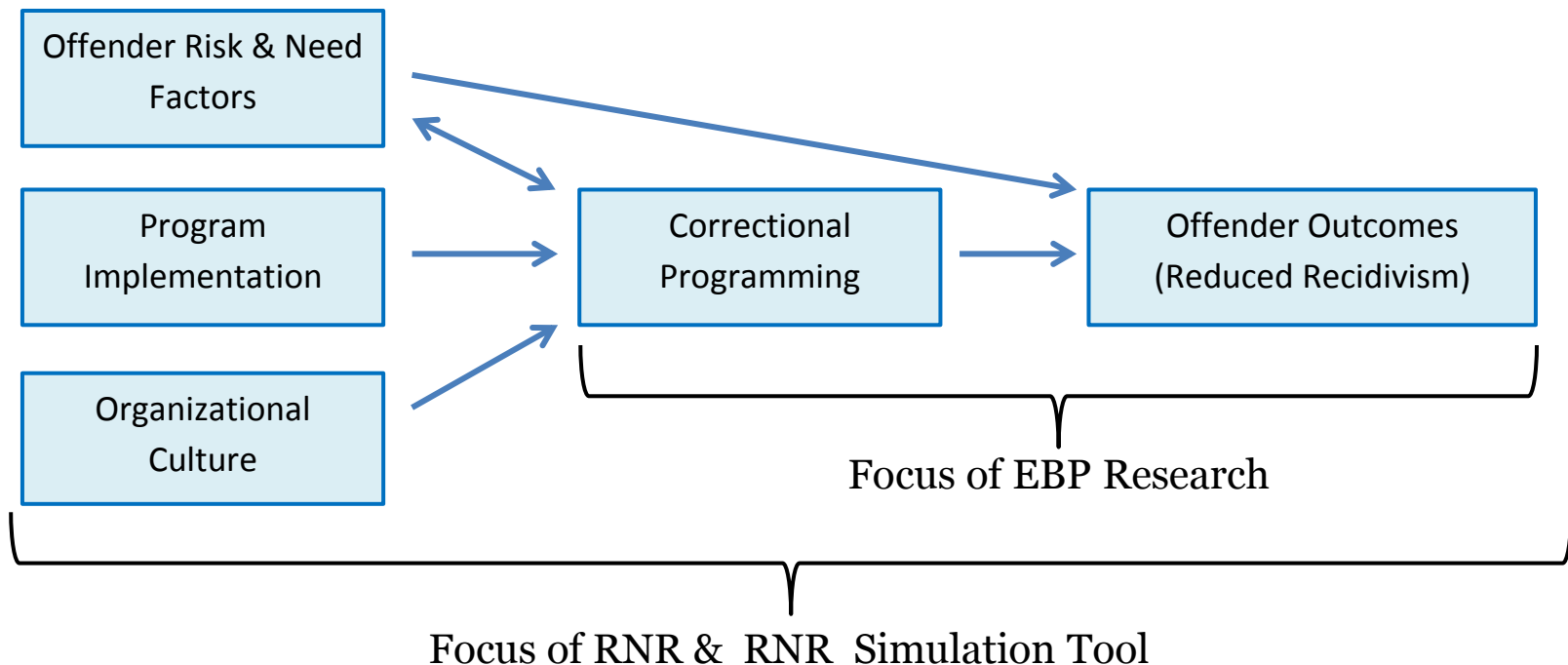
# The RNR Framework

- Three core principles
  - **Risk** – match level of service to offender’s risk to reoffend
  - **Need** – target key behaviors we know will have an impact via evidence-based responses
  - **Responsivity** – yield maximized when intervention is evidence-based and tailored to offender’s risk and needs



# The Big Picture

- More to understanding effectiveness
  - Who, what, and how?
  - Quality and implementation
  - Correctional culture supportive of human services



# Impact of Treatment

- Number Needed to Treat (NNT) to prevent one recidivist:

## Incarceration



## Evidence-Based Treatment



## RNR Treatment





# Goals for the RNR Simulation Tool

- Provide decision support tools for the field
  - Individual Level
  - Program Feedback
  - System Building Capability
- Improve the capacity to identify programming that will address public safety and health needs
  - Population-level impact
- Reduce recidivism and costs through responsiveness



# Tool Foundation

- Nationally-representative synthetic database
- A generated database that has all the properties of an “ideal” real-world database
- Reflects knowledge from multiple sources
- Flexible, can be **re-weighted** to:
  - Reflect local jurisdiction characteristics
  - Incorporate more recent evidence
  - Represent different recidivism definitions
- Flexible, can estimate prevalence of missing data attributes
  - Augments available data with national estimates





# Assess an Individual

- Make programming recommendations for individual offenders
  - Based on risk level, primary criminogenic needs, and other clinically relevant factors
- Facilitate program matching
  - Estimate recidivism rate and recidivism reduction associated with matching
- Improve access to treatment



# Hierarchy of Dynamic Needs

## Criminogenic Needs

- **Criminal Thinking**
- **Substance Dependence**
- **Antisocial Peers/Family**
- **Low Self-Control**
- **Antisocial Values**

## Destabilizers/Stabilizers

- **Mental Health**
- **Substance Abuse**
- **Employment**
- **Education**
- **Housing**
- **Family Dysfunction**

Together these dynamic factors influence the ideal level of care under the RNR model



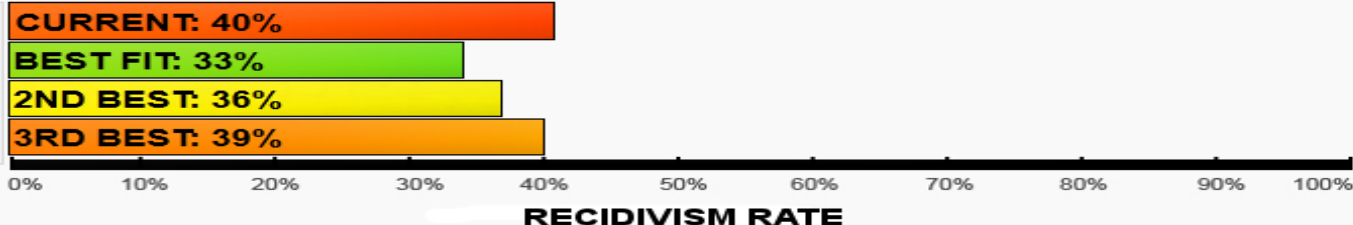
## Assess an Individual

CJ-TRAK > My Account > Assess an Individual

### Recommendation, Program Level, Estimated Recidivism Rate

Current Recidivism Rate:

# 40%



#### Best Fit Program Level: A

##### Example Programs

- Drug Treatment
- Therapeutic Community (TC)
- Medication-Assisted Treatment
- Drug Court

Level A programs target drug dependence on criminogenic drugs (e.g., cocaine, heroin, and amphetamines), but also include interpersonal and social skills interventions to target criminal thinking and criminal lifestyle issues. These programs target predominately higher-risk offenders, have a dosage of approximately 300 clinical hours, and are implemented by staff with advanced degrees using an evidence-based treatment manual. Examples may include residential drug treatment, therapeutic communities, specialty courts, or intensive outpatient treatment.

#### 2nd Best Program Level: B

##### Example Programs

- Cognitive Behavioral Therapy (CBT)
- Intensive Supervision Probation (ISP) w/ Treatment
- Therapeutic Community (TC)
- Counseling
- Drug Court

Level B programs primarily target criminal thinking using cognitive restructuring techniques, but also include interpersonal and social skills interventions. These programs target predominately moderate to high risk offenders, use cognitive-behavioral or behavioral based methods, have a dosage of approximately 300 clinical hours, and are implemented by staff with advanced degrees in related fields using an evidence-based treatment manual. Examples may include cognitive-based criminal thinking curriculums, therapeutic communities, behavioral interventions, and intensive supervision paired with treatment to change criminal thinking patterns.

#### 3rd Best Program Level: C

##### Example Programs

- Cognitive Behavioral Therapy (CBT)
- Counseling
- Mental Health Treatment
- Domestic Violence Treatment
- Sex Offender Treatment
- Drug Court

Level C programs primarily target substance abuse and mental health functioning. These programs focus on developing social functioning skills to reduce criminal activity, but may also include some cognitive restructuring work to address criminal thinking patterns. These programs target predominately moderate risk offenders, have a dosage of approximately 200 clinical hours, and are implemented by staff who are certified in the programs evidence-based curriculum. Examples may include manualized drug treatment, individual or group counseling to address substance abuse or mental health, outpatient treatment, or drug treatment/mental health courts.

## Assess an Individual

CJ-TRAK > My Account > Assess an Individual

### Recommendation, Program Level, Estimated Recidivism Rate

Current Recidivism Rate:

# 67%

**CURRENT: 67%**

**BEST FIT: 55%**

**2ND BEST: 60%**

**3RD BEST: 65%**

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

**RECIDIVISM RATE**

#### Best Fit Program Level: A

##### Example Programs

- Drug Treatment
- Therapeutic Community (TC)
- Medication-Assisted Treatment
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Level A programs target drug dependence on criminogenic drugs (e.g., cocaine, heroin, and amphetamines), but also include interpersonal and social skills interventions to target criminal thinking and criminal lifestyle issues. These programs target predominately higher-risk offenders, have a dosage of approximately 300 clinical hours, and are implemented by staff with advanced degrees using an evidence-based treatment manual. Examples may include residential drug treatment, therapeutic communities, specialty courts, or intensive outpatient treatment.

#### 2nd Best Program Level: B

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# Assess an Individual Implications

- Knowledge translation of RNR principles at the individual level
  - Utilize screening and assessment information
  - Triage dynamic offender needs
    - Prioritize along the spectrum of needs
- Learning component
  - Makes users aware of the RNR model and key components of risk and need
- Facilitate RNR supervision and system of care approach





# RNR Program Tool

- Classify programs
  - Knowing key programs features drives responsibility
- Implementation related to effectiveness
  - Assess what aspects of programs could be improved to better address targets
- Determine where there may be gaps in available services to meet diverse client needs





# Classifying Programs

- 6 program levels to guide responsivity
  - Offenders matched to levels based on risk and primary needs
- Essential features distinguish programs
  - Target behaviors, clinical hours, risk level, use of manual, screening, staff credentials...
- Additional features refine score of a program within its assigned level



# RNR Program Level Targets

- Target = Primary intervention focus
  - Step-down model

GROUP A

- Dependence on Hard Drugs

GROUP B

- Criminal Thinking/Cognitive Restructuring

GROUP C

- Substance Abuse and Mental Health

GROUP D

- Self Improvement & Management

GROUP E

- Life Skills (e.g. Education, Employment)

GROUP F

- Punishment (supervision) Only



# Scoring The Program Tool

- Essential features and targets drive program level classification
- 6 scoring areas
  - *Risk principle* (15pts)
  - *Need principle* (15pts)
  - *Responsivity principle* (15pts)
  - *Implementation* (25pts)
  - *Dosage* (20pts)
  - *Additional features* (10pts)



# PROGRAM LEVEL = C

## RISK

63%

Programs scoring high on the Risk Principle domain of the RNR Program Tool use a validated risk assessment tool to identify individual risk level and target one risk level (i.e. higher-risk only, lower-risk only).

## NEED

100%

Programs scoring high on the Needs Principle domain of the RNR Program Tool target a criminogenic need (drug dependence or criminal thinking) and assess for the need using a target specific assessment (e.g. DSM-IV, ASAM, TABE, TCU-CTS).

## RESPONSIVITY

53%

Programs scoring high on the Responsivity Principle domain of the RNR Program Tool in Level C use cognitive-behavioral or behavioral interventions, or intensive supervision with little to no treatment.

## IMPLEMENTATION

68%

Programs scoring high on the Implementation domain of the RNR Program Tool in Level A have specific completion criteria requiring participants to successfully complete all program requirements, treatment and supervision/correctional staff communicate at least monthly about individual's progress, have been evaluated by an external entity, use an evidence-based treatment manual, use coaching model for staff development, assess quality using external audits, and are operated by at least 50% clinical staff with most having at least a certification in the program curriculum and/or college degrees in relevant fields.

## DOSAGE

71%

Programs scoring high on the Dosage domain of the RNR Program Tool in Level C have at least 200 clinical hours, have programming at least weekly that last for approximately 18 or more weeks, 10+ hours per week, and includes aftercare and phases.

## ADDITIONAL FEATURES

88%

Programs scoring high on the Additional Features Domain of the RNR Program Tool use phases or levels of programming, include supplemental services in addition to their primary programming, are community-based, include at least some additional restrictions on individual behavior, randomly drug test, and have received technical assistance in the previous 12 months.

## OVERALL SCORE

72%

# Program Tool Implications

- Classification facilitates matching
- Tool generates program-specific feedback
  - Quality improvement
  - Key features, strengths, targets for improvement
- Helps CJ agencies identify available programs
- Translates RNR concepts at a program level
  - Program intensity; dosage; implementation fidelity; screening and assessment





# Assess Jurisdiction's Capacity

- Is programming available to meet population need?
  - Considers the prevalence of risk, needs, and destabilizers within a jurisdiction
  - Jurisdiction-specific data and feedback
- Treatment need versus treatment capacity
  - Estimates service provision gaps



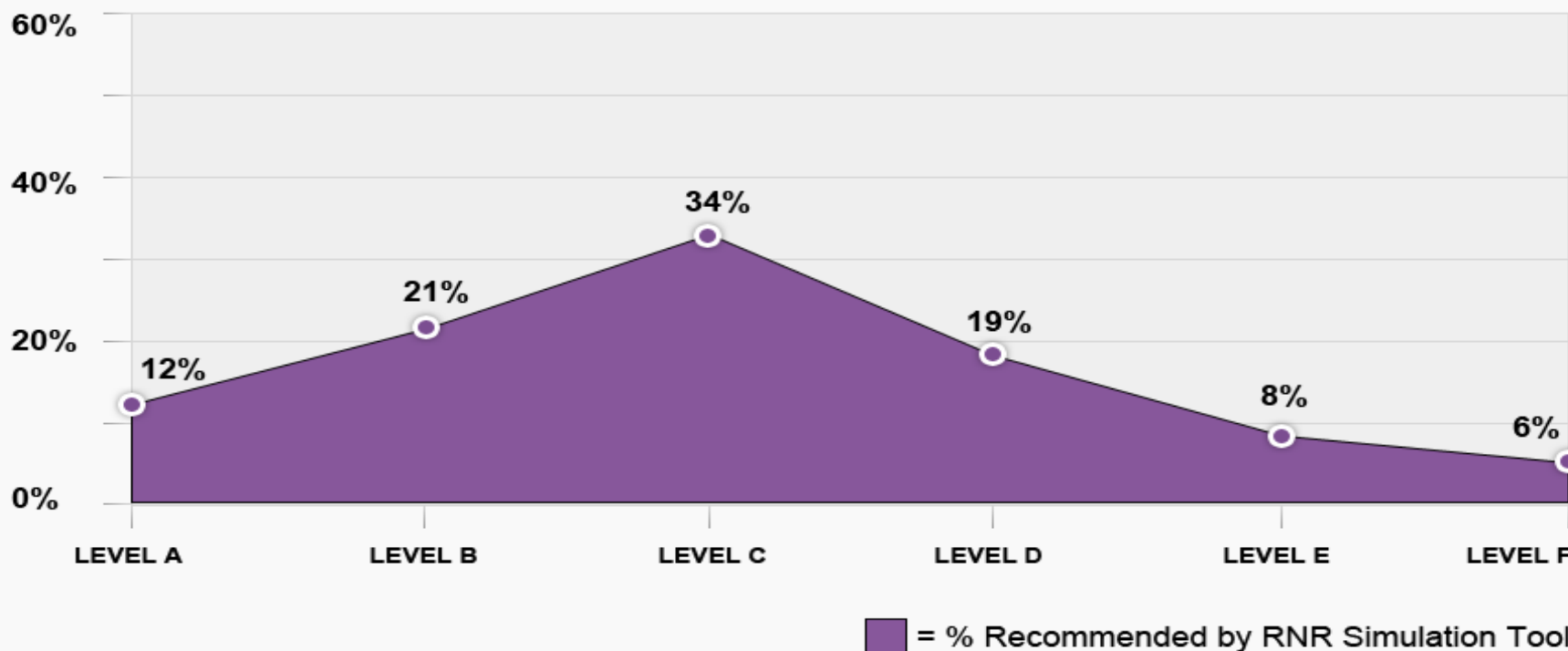
## Assess Jurisdiction's Capacity

CJ-TRAK > My Account > Assess Jurisdiction's Capacity

### Program Level Capacity Needed (N=3412)

[SWITCH TO BAR GRAPH](#)

Based on the information that has been entered for your jurisdiction, the Program Level Capacity Needed for your jurisdiction is presented below. Click on each level for more information on the types of programs that would appropriately satisfy the need for each level.



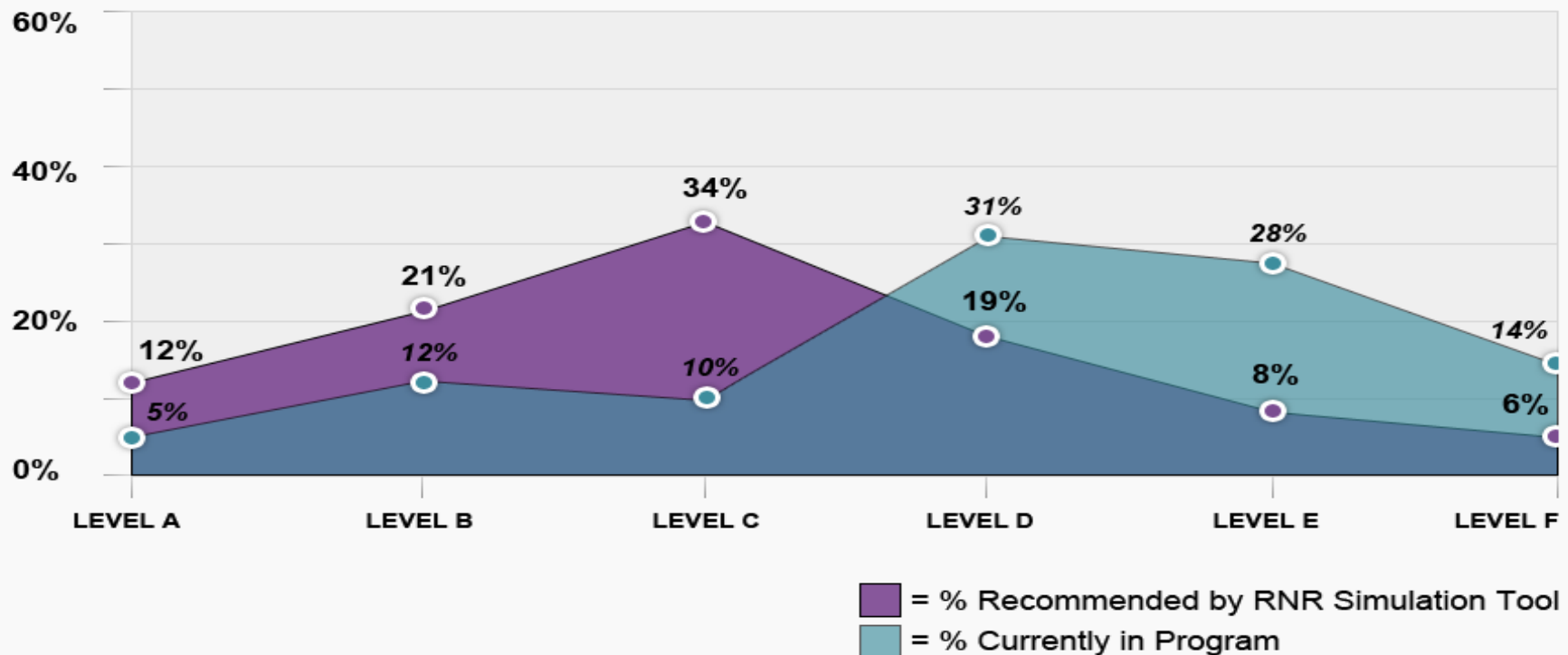
EXPLORE YOUR JURISDICTION'S  
RESPONSIVITY CAPACITY

## Assess Jurisdiction's Capacity

[CJ-TRAK](#) > [My Account](#) > [Assess Jurisdiction's Capacity](#)

### Treatment Gap

Based on the information that has been entered for your jurisdiction, the Program Level Capacity Needed for your jurisdiction is presented below. Click on each level for more information on the types of programs that would appropriately satisfy the need for each level.



[GO BACK TO PROGRAM LEVEL CAPACITY NEEDED](#)



# Jurisdiction Capacity Implications

- Identifies gaps and surpluses of programming
  - Utilizes The RNR Program Tool
- Guides resource allocation and system planning
  - Better alignment of services to population needs
  - Facilitates selection of providers
- Focus on system-wide change
  - Access to care
  - Public health impact



# Overview

- CJ agencies often lack capacity for responsiveness
  - Risk and need assessed, but how used?
  - Little known about community-based programs
- Lack of decision-support tools
  - Individual-level and system capacity issues
- Improved outcomes achieved through:
  - Alignment of programming with individual needs
  - Improved classification of available programs
  - Building capacity to address population needs



# Roll-Out

- Online use of the RNR Simulation Tool with phone and email assistance.
- Use of the national databases (compiled) with on-site technical assistance
- Reweight the national database (compiled) with on-site technical assistance including working.
- Integrating local data bases into the compiled data base with on-site technical

# Potential Applications

- Chicago, Illinois: Committee to Review Programming to Advance Implementation of ACA
- North Carolina DOC & Public Health: To review program availability
- Santa Cruz JRI Site (presentation)

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