# The Impact on Drug Use and Other Psychosocial Outcomes: Results from NIJ's Multi-Site Adult Drug Court Evaluation, Part 1



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Presented at the NADCP 16<sup>th</sup> Annual Training Conference, Boston, MA, June 4, 2010, Research and Evaluation Track









### About the Study

- Research Partnership: The Urban Institute, Center for Court Innovation, & Research Triangle Institute, with funding from the National Institute of Justice (NIJ)
- Drug Court vs. Comparison Sites:
  - > <u>Drug Court:</u> 23 sites in 7 geographic clusters (n = 1156)
  - $\triangleright$  Comparison: 6 sites in 4 geographic clusters (n = 625)
- **Repeated Measures:** baseline and multiple follow-ups:
  - > Interviews at baseline, 6 months, 18 months
  - > Oral fluids drug test at 18 months
  - Official recidivism records up to 24 months

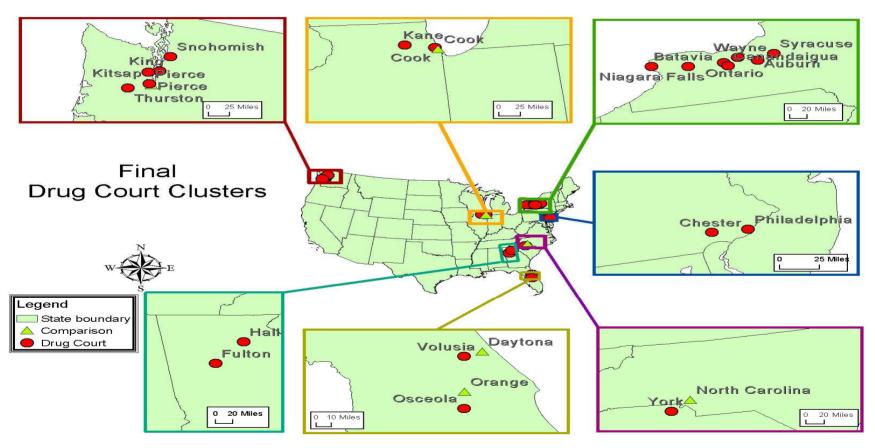








### Drug Court and Comparison Sites











## Nature of the Intervention: Drug Court vs. Comparison Sites

#### **Interventions Received in Six Months After Baseline**

	Drug Court (n = 1,009)	Comparison (n = 524)
Percent of offenders with any treatment	83%***	36%
Average days in treatment	59***	23
Percent with any judicial status hearings	93%***	14%
Average number of status hearings	10.3***	1.2
Percent with supervision officer contact	96%**	71%
Average number of contacts	17.2***	6.4
Percent with any drug test	95%***	61%
Average number of drug tests	30.9***	4.3
Percent receiving any judicial sanction	50%***	15%
Percent receiving praise from the judge	76%***	10%

+p<.10, \*p<.05, \*\*p<.01, \*\*\*p<.001.









### Offender Background - #1

#### Baseline Sample Characteristics (N = 1,781)

<u> </u>	, ,
Age	33.8
Male	69%
Race/Ethnicity	
White	54%
Black/African-American	34%
HS degree/GED or higher	59%
Currently employed	36%
Average # criminal acts: six months pre-baseline	21.2
Mental Health	
Depression (multi-item instrument)	39%
Anti-social personality (multi-item instrument)	43%
Narcissistic personality (multi-item instrument)	50%









### Offender Background - #2

#### Baseline Drug Use (N = 1,781)

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Primary drug of choice	
Alcohol	14%
Marijuana/hashish	22%
Powder cocaine	10%
Crack	26%
Heroin	5%
Hallucinogens	0%
Amphetamines	9%
Prescription drugs	4%
Methadone	0%
Multiple Drugs	2%
Age of first drug use	13.53
Ever used by drug:	
Alcohol	98%
Marijuana	94%
Powder cocaine	40%
Crack	37%
Heroin	30%
Hallucinogens	57%
Amphetamines	5%
Prescription drugs	35%
Methadone	12%
Drug use (six months pre-baseline)	84%
Days of drug use/mth (six months pre-baseline)	13.2









### Low Stress Methodology Review

- **Attrition:** Follow-Up Contact Rates at 18 Months:
  - ightharpoonup Drug Court: 82% (follow-up N = 951)
  - $\triangleright$  Comparison Offenders: 84% (follow-up N = 523)
- Baseline Drug Court vs. Comparison Group Differences: Significant differences on 37 of 61 baseline characteristics (spanning demographics, community ties, mental and physical health, drug use history, treatment history, and criminal history)
- **Statistical Adjustment:** All results are statistically <u>adjusted</u> to compensate for differences at baseline ("propensity score adjustments" and "super weighting")









### Core Research Questions

- 1. Do drug courts work? (Do they reduce drug use, criminal behavior, and other associated problems?)
- 2. Do drug courts influence offender attitudes and perceptions, and do those changes make drug courts more effective?
- 3. Which policies and practices make drug courts more or less effective in achieving their desired outcomes?
- 4. Do drug courts generate cost savings for the criminal justice system or other public institutions?









### Part 1. Do Drug Courts Work?

- A. Criminal Behavior
- B. Incarceration
- C. Drug Use
- D. Socioeconomic Status (education, employment, income)
- E. Mental Health
- F. Family Support
- G. Homelessness
- H. Program Retention Rates









### Part 2. Do Drug Courts Work?

- A. Criminal Behavior
- B. Incarceration
- C. Drug Use
- D. Socioeconomic Status (education, employment, income)
- E. Mental Health
- F. Family Support
- G. Homelessness
- H. Program Retention Rates









### Drug Use: Literature to Date

- **Drug court participation reduces recidivism rates** (Finigan, 1998; Goldkamp and Weiland 1993; Gottfredson and Exum 2002; Harrell and Roman 2002; Jameson and Peterson 1995; Peters and Murrin 2000; Wilson et al. 2006).
- BUT extremely few prior studies that focus on substance use:
  - Brooklyn and Baltimore: Participants less likely to use drugs one year after entry (Brooklyn: Harrell et al. 2001; Baltimore: Gottfredson et al. 2003)
  - Maricopa Co., Arizona, and Washington, D.C.: Participants less likely to use "serious" drugs (heroin or cocaine); no positive effect on marijuana use (Maricopa: Deschenes et al. 1995; D.C.: Harrell et al. 1998)
  - Chester County (PA): Participants had significant lower rates of positive drug tests when participants were actively in the program & comparison were supervised by probation (Brewster 2001)

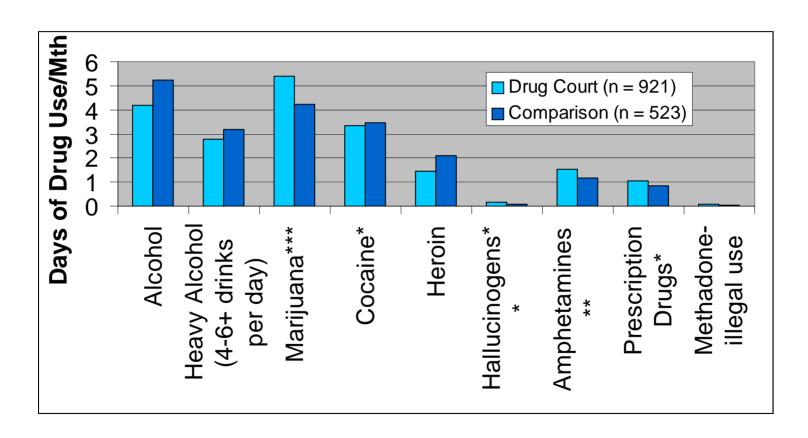








### Baseline Drug Use: Days of Use Per Month



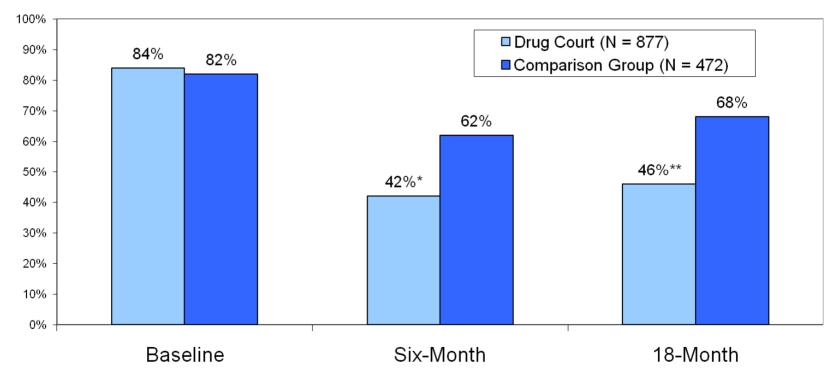


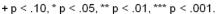






# The Trajectory of Recovery: Percent Used Drugs in Previous Six Months





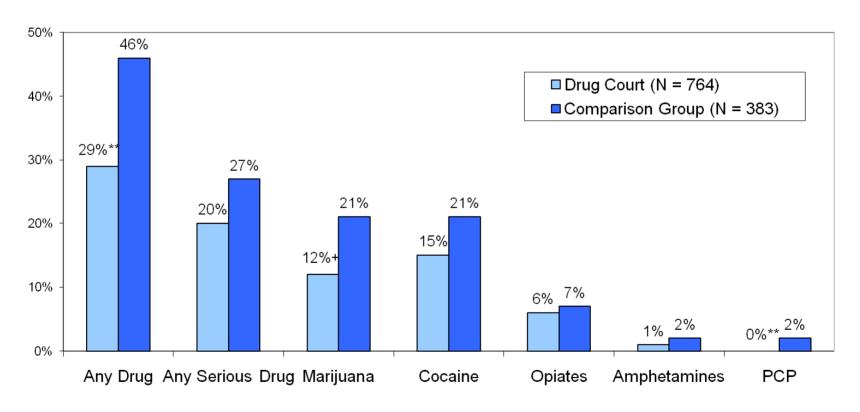








# MADCE Results: Drug Test Results at 18 Months



+ p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001.









### Predictors of Drug Use at 18 Months

- Female or black defendants
- Not homeless at baseline
- Primary drug of cocaine at baseline
- Drug use at baseline
- Depression or Antisocial Personality Disorder
- Lack of drug court participation









# For Whom Drug Courts Work: Predicting Future Drug Use

(Drug use=Average # Days of Drug Use/Month in the year preceding 18 month)

- More serious drug users responded better to the drug court model
  - Offenders who used drugs more before the baseline benefitted more from the intervention
  - Conversely, offenders whose primary drug was marijuana benefitted less
- Offenders who had co-occurring (depression & narcissism) disorders at baseline benefited less

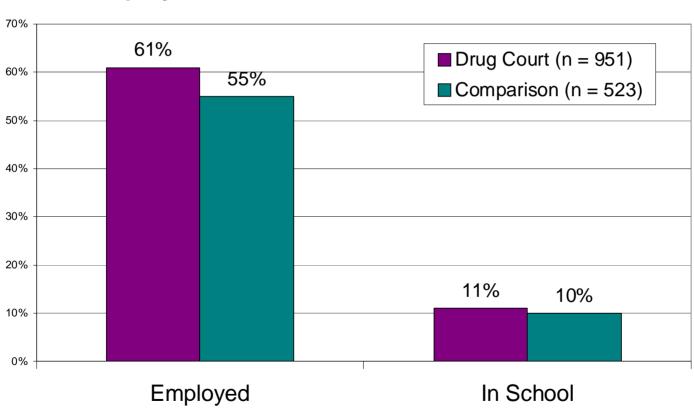






# MADCE Results: Socioeconomic Status #1

#### **Employment and School Status at 18 Months**



+ p < .10 \* p < .05 \*\* p < .01 \*\*\* p < .001



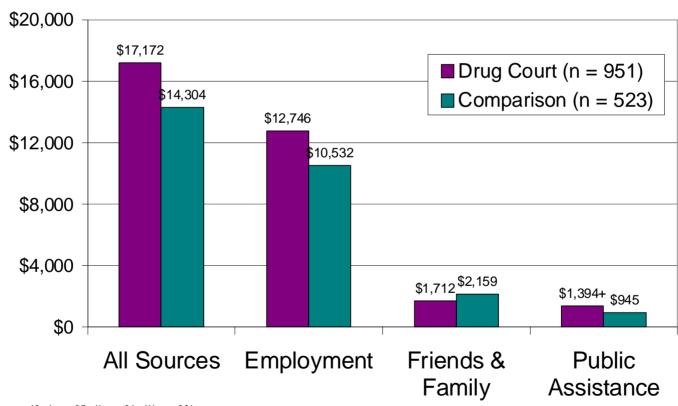






### MADCE Results: Socioeconomic Status #2

#### **Annual Income at 18 Months**







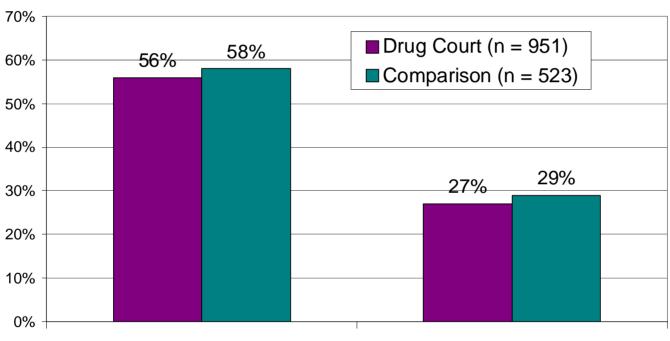






# MADCE Results: Mental Health

#### **Mental Health at 18 Months**



Mental Health "Very Good" or "Excellent" (4-5 on 5-pt. scale)

Depressed (based on multi-item instrument)

+ p < .10 \* p < .05 \*\* p < .01 \*\*\* p < .001



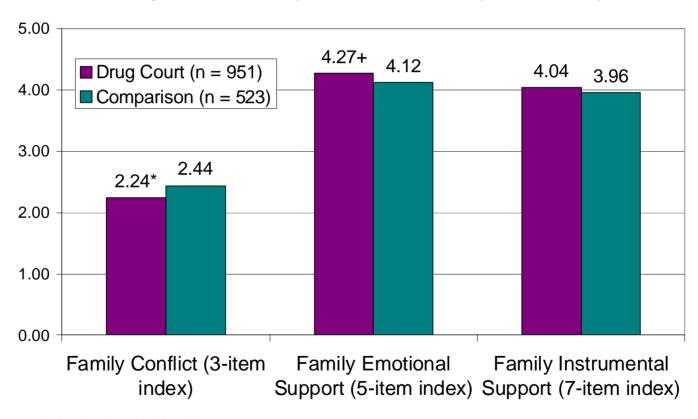






# MADCE Results: Family Support

#### Family Relationships at 18 Months (1-5 Scales)



+ p < .10 \* p < .05 \*\* p < .01 \*\*\* p < .001

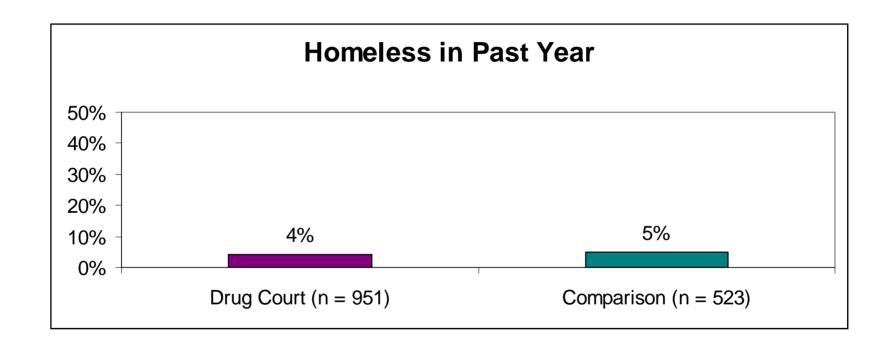








# MADCE Results: Homelessness











# Predictors of Positive Psychosocial Outcomes at 18 Months

- Female defendants
- High school degree or GED
- Homeless defendants
- Less depressed defendants
- Drug court participation reduced criminal activity and drug use but weakly influenced psychosocial outcomes.









### MADCE Results: 18 Month Outcomes Summary

- **Drug Use:** significant reduction in likelihood and frequency of drug use
- Socioeconomic Status: possible modest effect (NS)
- Mental Health: no effect
- **Family Ties:** significant reduction in family conflict; possible modest increase in emotional support (p < .10)
- **Homelessness:** no effect
- Criminal Activity & Incarceration: Attend MADCE Session #2 next to find out!









# Switching Gears: Drug Court Retention

- Importance of drug court retention rates:
  - Measures program's success in sustaining participation
  - Important interim predictor of positive longterm outcomes, such as reduced recidivism and drug use (e.g., see Anglin, Brecht, and Maddahian 1989; DeLeon 1988; Taxman 1998)









### More Retention

- Most commonly cited national one-year retention rate = 60% (Belenko 1998)
  - More recent studies have found higher rates (Rempel et al. 2003)
- All agree that drug courts are significantly more effective at retaining participants than voluntary treatment options (Condelli and DeLeon 1993; Simpson, Joe, and Brown 1997; Lewis and Ross 1994)
- So what is a reasonable and accurate national estimate?





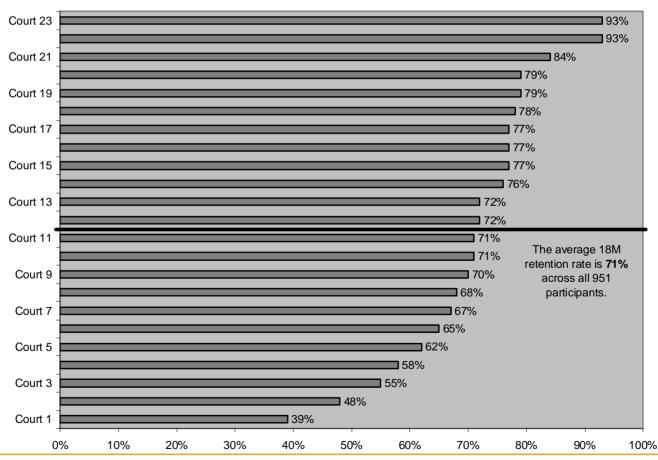




### **MADCE** Results:

### A National Retention Rate

#### 18-Month Retention Rates at 23 Adult Drug Courts











# Why Do Individuals Leave the Drug Court?

#### 23 Drug Courts, 18 Months after Baseline

Total Participants	951
Currently in Drug Court	28%
Why no longer in drug court?	(N=674)
Graduated	59%
Involuntary Failure <sup>1</sup>	26%
Voluntary Failure	15%
If voluntary failure, why <sup>2</sup>	(N=89)
too many restrictions on lifestyle	22%
not satisfied with services received	12%
drug court conflicted with work/child care responsibilities	9%
drug court involved too much work	6%
did not think drug court fair	5%
drug court too hard or expensive to get to	3%
did not think needed services being offered through drug court	3%
drug court costs too much	2%
did not get along with people running drug court	1%
other reason	36%
What was the sentence for failure?	(N=270)
jail/prison	74%
probation	14%
something else	5%
nothing yet	7%

<sup>&</sup>lt;sup>1</sup> Involuntary failure includes "kicked out" and "put in jail" as reasons for exiting the drug cou

<sup>&</sup>lt;sup>2</sup> Respondents were only asked this question if voluntary failure (i.e., they dropped out of the drug court themselves.)









### Predictors of 18-Month Retention

- Older age
- Employed or in school at baseline
- Have a primary drug of choice that is not marijuana
- Have less criminal activity in the months before baseline
- Suffer less from depression at baseline
- Have a less narcissistic personality





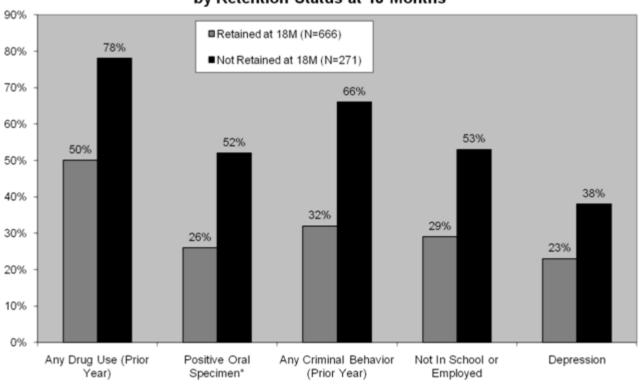




### **MADCE** Results:

## Drug Court Retention As Indicator of Positive Long-Term Outcomes

#### Simple 18-Month Outcomes by Retention Status at 18 Months



Note: Respondents were required to consent to provide an oral specimen at the 18-month interview. There were 752 drug court participants who consented: 590 who were retained and 162 who were not retained at 18 months.









### MADCE Results: In Summary and Looking Forward

- Drug Court Participation reduces drug use, less obvious positive impacts on socioeconomic status and family support; no effect on mental health or homelessness
- Drug Court Retention is an important indicator of long-term positive outcomes, including reduced drug use, recidivism, and depression, and more employment and school involvement
- MADCE Results Part #2 coming up next drug court impact on criminal behavior and participant attitudes





