

Understanding Criminogenic Needs: Untangling the Role of Mental Health and Substance Abuse

Fred Osher, M.D.
Faye S. Taxman, Ph.D.

Making the Most of Second Chances
February 24, 2011

JUSTICE ★ **CENTER**
THE COUNCIL OF STATE GOVERNMENTS
Collaborative Approaches to Public Safety

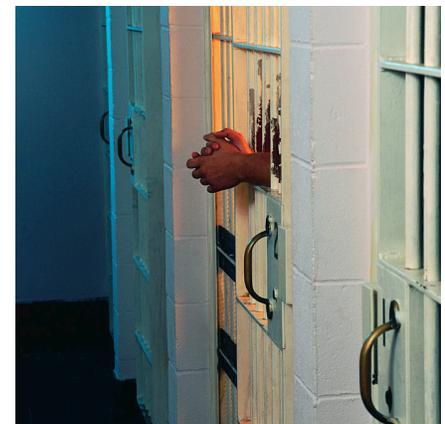
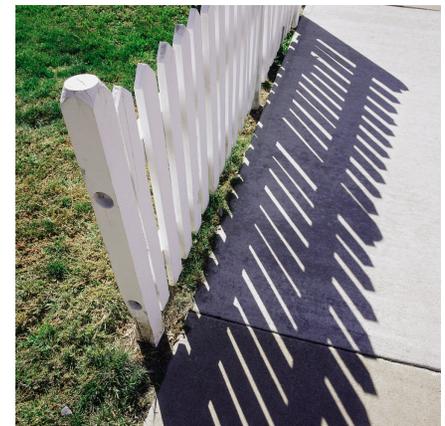
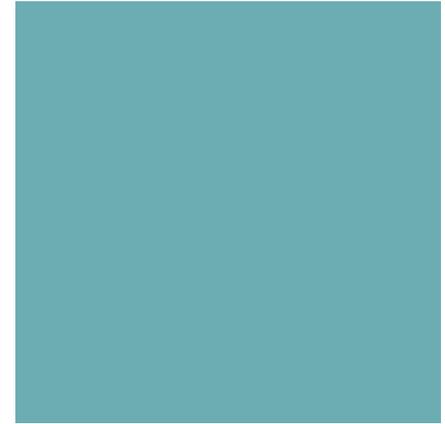


Center for Advancing Correctional Excellence!
<http://gemini.gmu.edu/ebct>



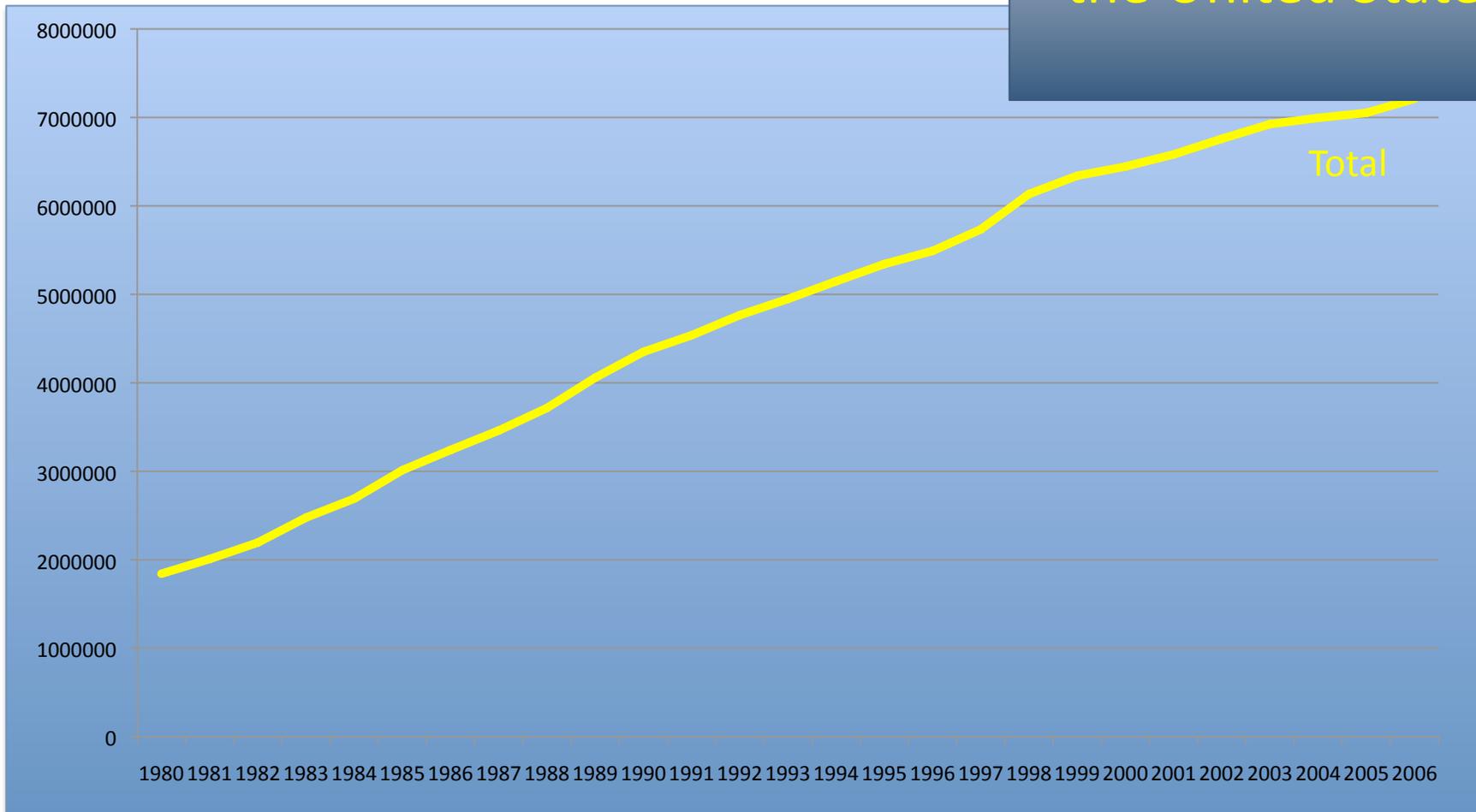
Overview

- 1 Risks and Needs in Persons with Mental Illnesses/Co-occurring
2. Risks and Needs in Persons with Substance Use Disorders/Co-occurring
3. Implications for Policy and Practice



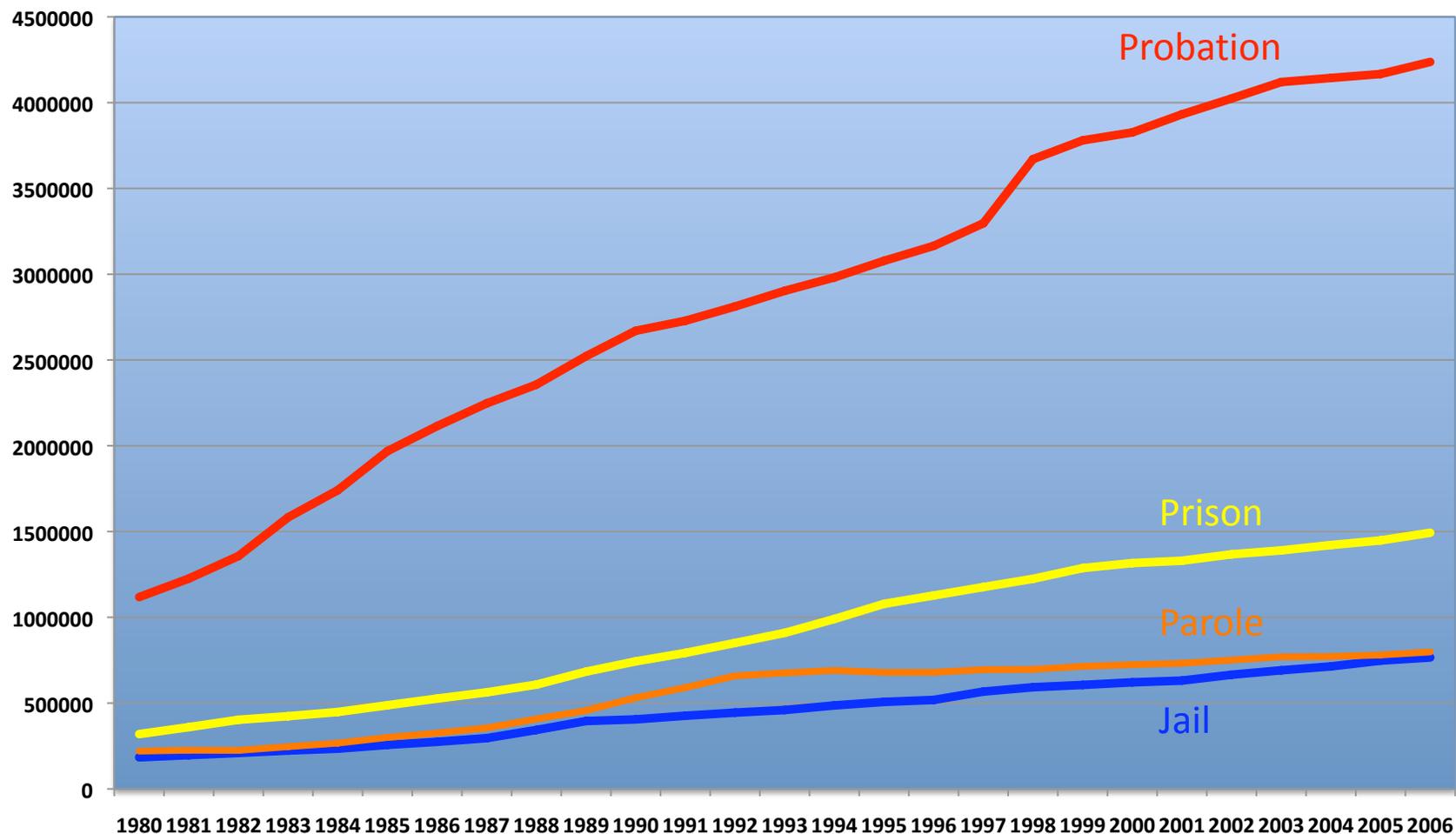
Burgeoning corrections population is now over 7.3 million

3.2% of all adults in the United States



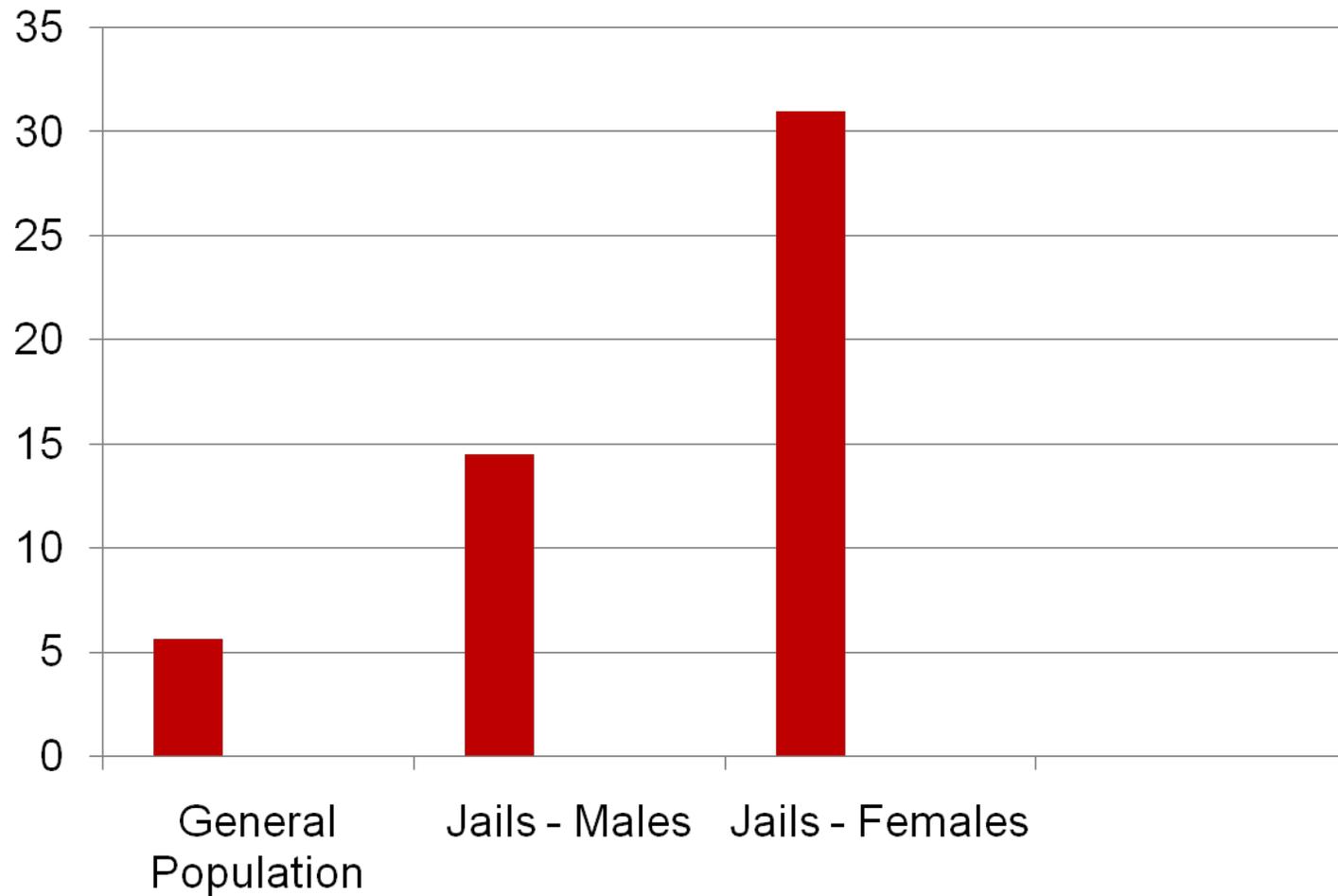
Source: Bureau of Justice Statistics (2008)

Most are supervised in the community



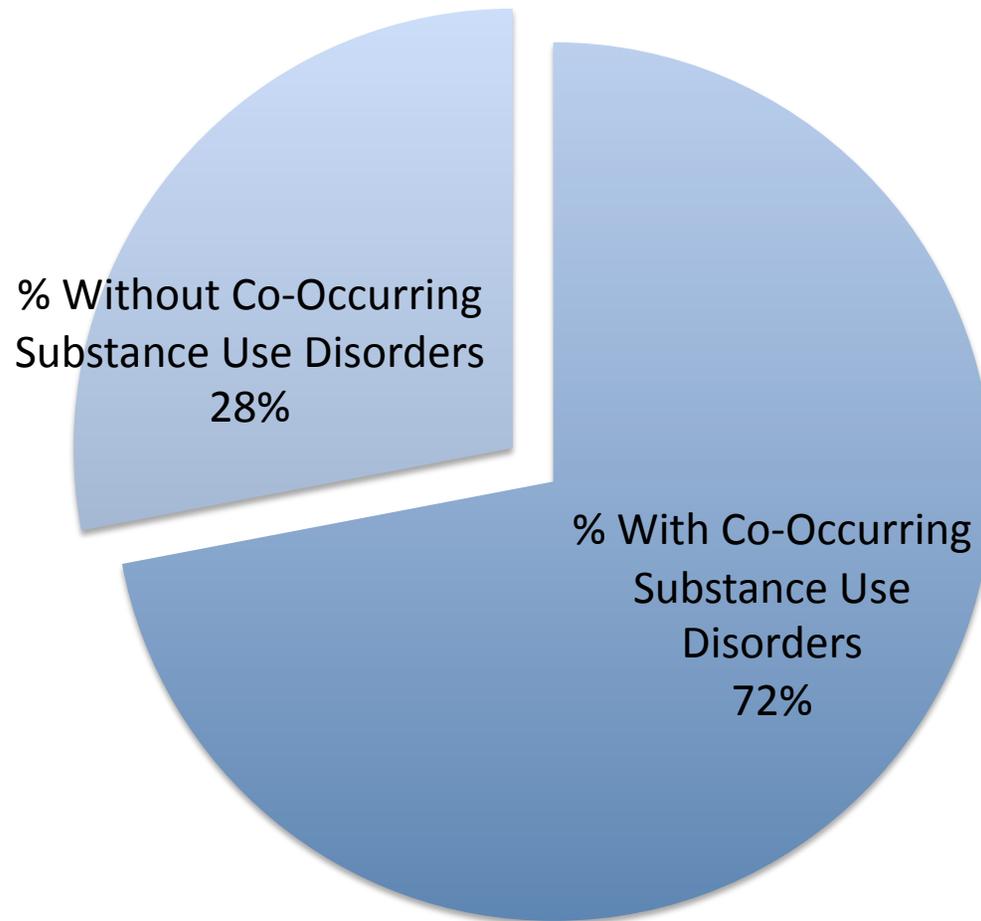
Sources: Bureau of Justice Statistics (2007); Skeem, Emke-Francis, et al. (2006)

Serious Mental Illness is over-represented in CJ populations



Steadman, Osher, et al, 2009

Most have co-occurring substance abuse disorders



Source: The National GAINS Center, 2004

Compared to those without mental illness, reentering individuals with mental illnesses are more likely...

- to be homeless
- to be unemployed
- to be psychologically impaired (including extensive trauma histories)
- to have prior criminal history
- Have more criminogenic risk factors

“Central Eight” risk factors for criminal recidivism (Andrews, 2006)

Risk Factor	Need
History of Antisocial Behavior	Build alternative behaviors
Antisocial Personality Pattern	Problem solving skills, anger management
Antisocial Cognition	Develop less risky thinking
Antisocial Attitudes	Reduce association with criminal others
Family and/or Marital Discord	Reduce conflict, build positive relationships
Poor school and/or work performance	Enhance performance, rewards
Few leisure or recreation activities	Enhance outside involvement
Substance abuse	Reduce use

Offenders with mental illnesses have significantly *more* of “The Central Eight”

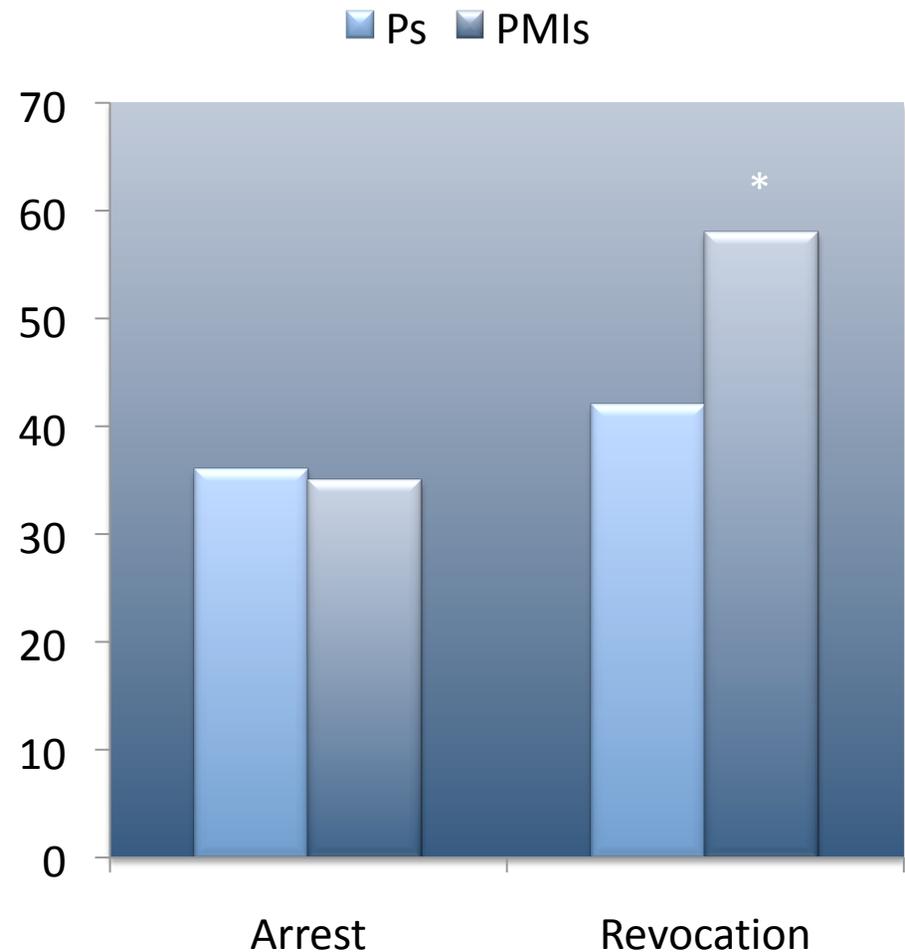
LS/CMI Total Scores	MI	Non-MI
General risk/need (Section 1)***	27.5 (5)	24.8 (5)
Specific risk/need (Section 2)***	6.5 (3)	4.7 (3)

...particularly “Antisocial Pattern”***

...and these predict recidivism more strongly than risk factors unique to mental illness (i.e., HCR-20 total scores)

Those with serious mental illnesses often “fail” community supervision

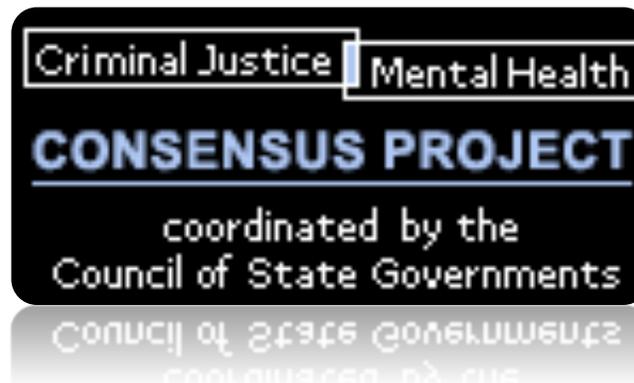
- Vidal, Manchak, et al. (2009)
 - Screened 2,934 probationers for mental illness; 13% screened in
 - Followed for average of two years
- No more likely to be arrested...
- But 1.38 times more likely to be revoked



See also: Eno Loudon & Skeem, 2009; Porporino & Motiuk, 1995

The perceived root of the problem

“People on the front lines every day believe too many people with mental illness become involved in the criminal justice system because the mental health system has somehow failed. They believe that if many of the people with mental illness received the services they needed, they would not end up under arrest, in jail, or facing charges in court”



Arrest is not always a direct product of mental illness

Table 3

Mean of three raters' probability estimates of effects of serious mental illness and substance abuse on committing a criminal offense and number of criminal offenses assigned a mean estimate of 75 ("probably") or higher

Effect	Mean	CI	Rating $\geq 75^a$	
			N	%
Direct effect of serious mental illness	6.4	3.0–9.9	4	4
Indirect effect of serious mental illness	14.3	10.2–18.4	4	4
Direct effect of substance abuse	22.5	15.7–29.3	21	19
Indirect effect of substance abuse	8.6	4.0–13.2	8	7

^a The probability that offenses were the result of serious mental illness or substance abuse was rated as follows: 0, definitely not; 25, probably not; 50, possibly; 75, probably; and 100, definitely.

Recidivism is not always a direct product of mental illness

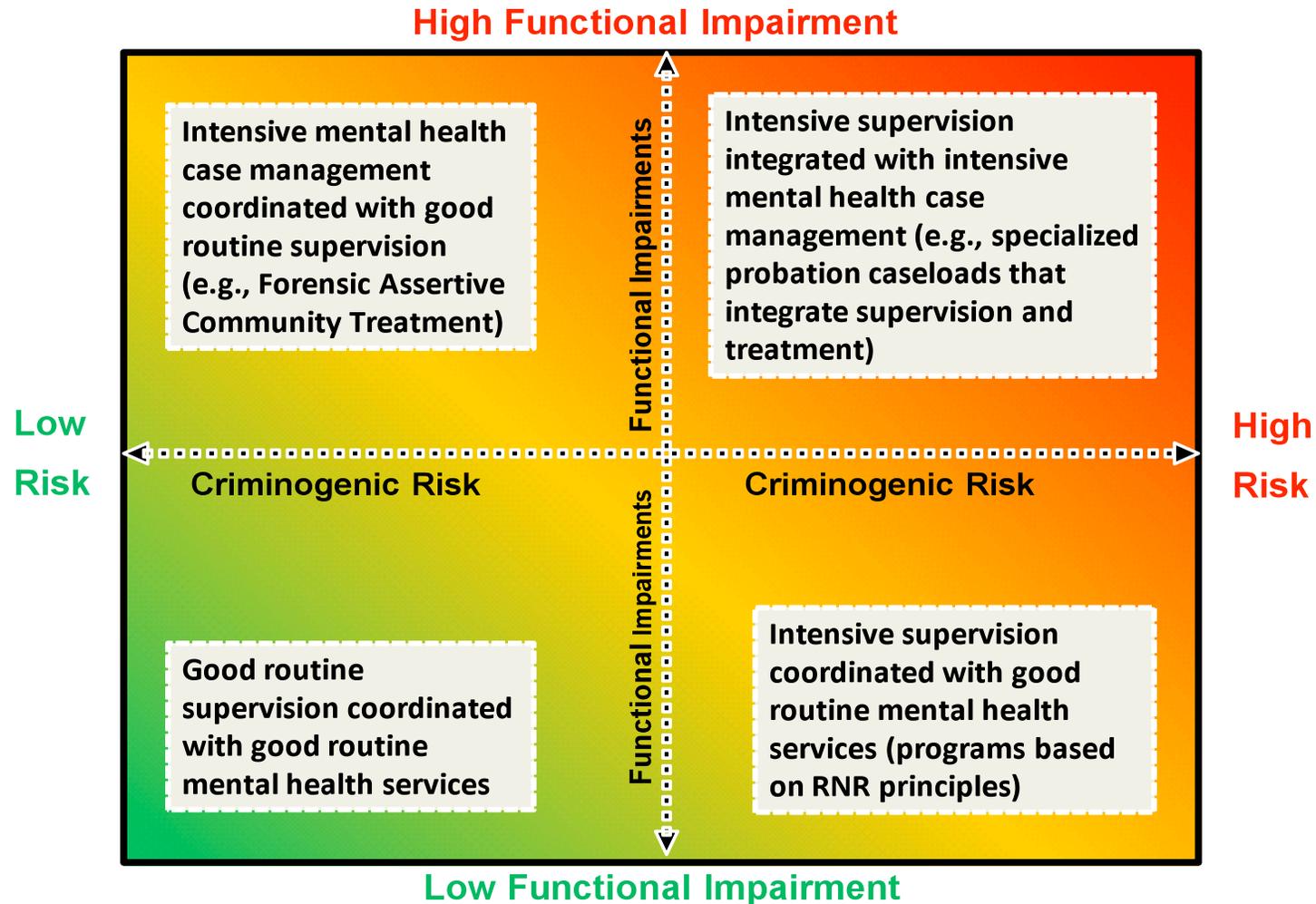
- Leading risk factors (e.g., criminal history, young age, substance abuse, personality traits) for violence and other crime are shared by those with and without mental illness

Table 5
Predictors of Violent Recidivism Within Domains

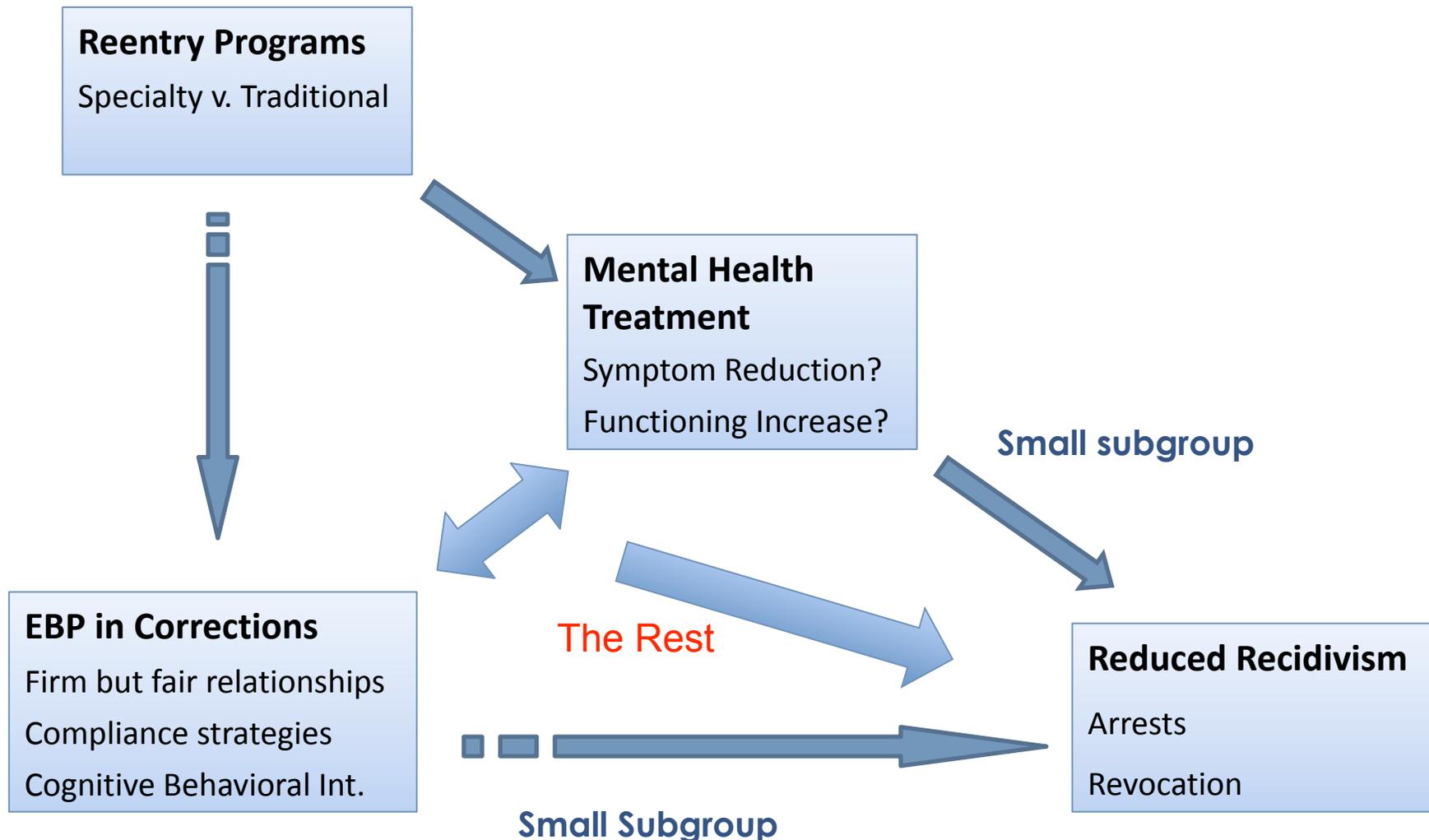
Domain	<i>Zr</i>	95% confidence interval		<i>z</i>	<i>Q</i>	<i>N</i>	No. of studies
		Lower	Upper				
Personal demographic	.12	.08	.16	5.36***	7.65	2,140	8
Criminal history	.15	.12	.18	8.42***	9.63	3,230	13
Deviant lifestyle	.08	.05	.11	4.46***	13.62	3,289	9
Clinical	-.03	-.05	-.01	2.69**	88.29***	7,532	22

Note. *Zr* = mean effect size; *z* = significance of *Zr*; *Q* = test of homogeneity.
** $p < .01$. *** $p < .001$.

Heterogeneity of CC Population



Toward an evidence-based model of “what works”

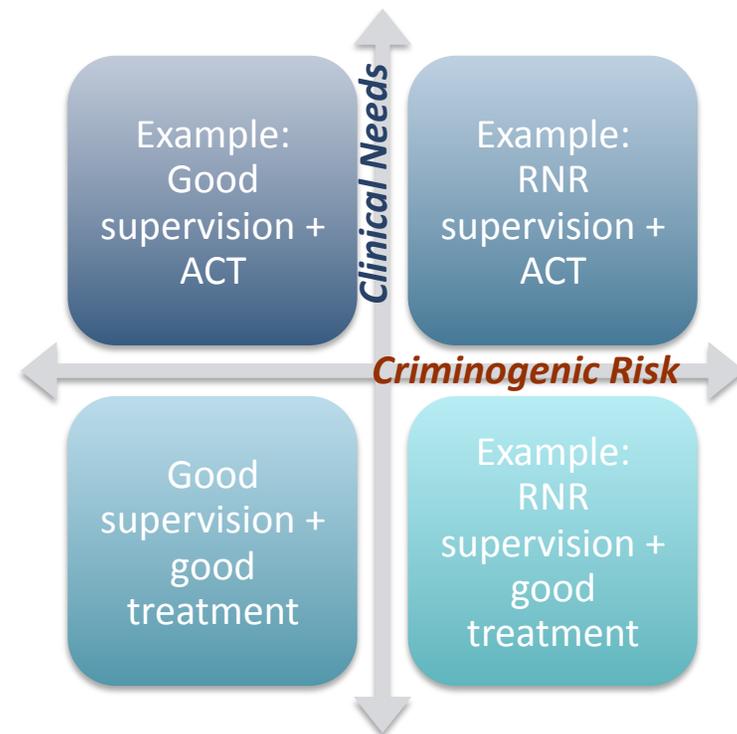


What to do.....

Screen and assess

- Identify offenders with mental illnesses, using a validated tool like the K-6 or BJMHS
 - http://www.hcp.med.harvard.edu/ncs/k6_scales.php
 - <http://gainscenter.samhsa.gov/HTML/resources/MHscreen.asp>
- Assess risk of recidivism, using a validated tool like the LS/CMI

Target criminogenic risk & clinical needs with EBPs



Use evidence-based mental health services for persons with SMI

- Assertive Community Treatment (ACT)
- Illness self-management and recovery
- Integrated treatment
- Supported employment
- Psychopharmacology
- Supported housing
- Trauma interventions
- Cognitive Behavioral Therapies

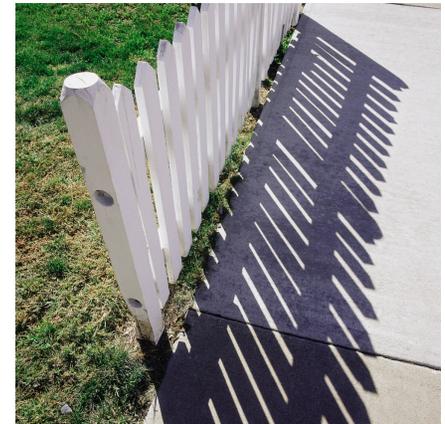
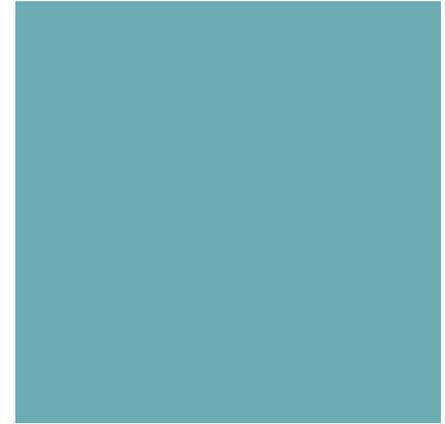
Use evidence-based principles of correctional rehabilitation

- Focus resources on high **RISK** cases
- Target criminogenic **NEEDS** like anger, substance abuse, antisocial attitudes, and criminogenic peers (Andrews et al., 1990)
- **RESPONSIVITY** - use cognitive behavioral techniques like relapse prevention (Pearson, Lipton, Cleland, & Yee, 2002)
- Ensure implementation (Gendreau, Goggin, & Smith, 2001)



Overview

- 1 Risks and Needs in Persons with Mental Illnesses/Co-occurring
2. Risks and Needs in Persons with Substance Use Disorders/Co-occurring
3. Implications for Policy and Practice



Acknowledgements

- Funded from the Bureau of Justice Assistance, 2009-DG-BX-K026 to Faye S. Taxman, Ph.D.

The Challenge

- *Risk, Need, and Responsivity* (RNR) is a model that corrections managers use to identify services and design case management strategies targeting the risk and need profile of the offender population.
- **RNR principles** are derived from evidence-based research reviews that link the expansion of specific treatment services to subsequent changes in the cost, size, and effectiveness of the correctional system.
- **CHALLENGE:** What steps need to be taken to ensure that current controls and services match the Risk-Needs level of each jurisdiction's corrections population?

EXAMPLE

Step 1: Identify risk level you are interested in: high, moderate or low (or any range) and provide the number (or rate) of offenders assigned to that risk level. (The process is repeated for each risk level).

Step 2: Identify the criminogenic needs for these offenders. For example, assume that the substance abuse disorder is distributed: 30% Dependent, 20% Abuser, 20% User, and 30% none. The jurisdiction will also need to estimate the prevalence of other criminogenic needs or special offenders such as sex offenders, violent offenders, and so on.

Step 3: Identify the current configuration of services that are available for high risk offenders with substance abuse disorders. Assume that the current system offers therapeutic communities for 5 percent, drug courts for 5 percent, outpatient services for 30 percent, and no other services.

Step 4: Identify a new configuration of services that might be appropriate based on the evidence-based practices. Assume 35 percent in drug courts and 15 percent in therapeutic community for the substance abuse abusers and dependent, and then the remaining 50 are placed in work release or intensive supervision with drug testing.

Step 5: Reports the expected cost for the new configuration and the expected recidivism rate. These estimates will be presented compared to the existing system. The user can see the impact on each outcome of cost, recidivism, and public safety and compare which model is best for their situation.

What comes first?

- CRIMINAL RISK
- CRIMINOGENIC NEEDS
 - Substance abuse dependency
 - Criminal thinking/antisocial behavior
 - Antisocial Peers
 - Family Dysfunction
- Mental Health Risk Factors

The order is important if we want to
Reduce the risk of recidivism

What is linked to recidivism?

- Direct Link
 - Risk
 - Substance Abuse Dependent
 - Criminal lifestyle
- Stabilizing Factors
 - Employment
 - Stable Family
 - Housing
- Destabilizers
 - Mental Health Risk
 - Housing (unstable, infrequent)

Prison Population Distribution of Factors

		Male				Female			
		Criminal History Risk Level				Criminal History Risk Level			
		Low	Moderate	High	% of Total	Low	Moderate	High	% of Total
Drug Severity	Dependent	3.2%	8.1%	17.8%	9.1%	5.9%	15.8%	30.1%	13.3%
	Abuser	60.8%	73.6%	70.9%	70.6%	56.1%	68.4%	62.1%	63.0%
3+ Criminogenic Needs	Yes	7.9%	13.8%	19.6%	13.9%	13.3%	23.8%	36.8%	20.9%
Mental Health At Risk	Yes	27.1%	29.5%	36.4%	30.4%	50.0%	54.4%	64.8%	53.7%
Population Type	Violent and Sexual	21.8%	15.6%	11.3%	15.9%	12.5%	10.1%	7.0%	10.7%
	Violent	49.6%	57.3%	61.5%	56.7%	50.4%	52.5%	55.6%	52.0%
	Substance Abuser	18.4%	16.9%	15.8%	16.9%	25.9%	28.3%	27.4%	27.3%
	General	1.5%	0.9%	0.4%	0.9%	3.4%	1.3%	0.0%	2.0%

^aImpact expected based on a 40% recidivism rate, ^b Impact based on a 60% recidivism rate, ^c Impact based on an 80% recidivism rate

Percents are based on total number of offenders in each criminal history level. Drug Severity not shown: none; Population types not shown include: sex offender, habitual offender, habitual burglar, domestic offender and drug trafficker.

Jail Population Distributions

		Male				Female			
		Criminal History Risk Level				Criminal History Risk Level			
		Low	Moderate	High	% of Total	Low	Moderate	High	% of Total
Drug Severity	Dependent	2.2%	4.9%	9.8%	5.7%	6.5%	7.6%	15.6%	8.3%
	Abuser	63.7%	61.0%	78.9%	67.0%	69.2%	52.7%	75.4%	62.3%
3+ Criminogenic Needs	Yes	7.8%	8.5%	18.7%	11.4%	17.9%	16.5%	33.3%	19.4%
Mental Health At Risk	Yes	23.3%	24.7%	38.9%	28.6%	52.9%	39.3%	57.0%	47.0%
Population Type	Violent and Sexual	7.2%	3.0%	3.3%	4.1%	1.4%	0.6%	0.0%	0.8%
	Violent	29.0%	22.4%	28.3%	25.8%	18.1%	12.7%	17.1%	15.4%
	Substance Abuser	47.3%	44.6%	54.8%	48.3%	65.1%	51.8%	78.2%	60.6%
	General	8.8%	23.3%	3.2%	13.7%	11.8%	31.3%	2.5%	19.7%

^a Impact expected based on a 40% recidivism rate, ^b Impact based on a 60% recidivism rate, ^c Impact based on an 80% recidivism rate

Percents are based on total number of offenders in each criminal history level. Drug Severity not shown: none; Population types not shown include: sex offender, habitual offender, habitual burglar, domestic offender and drug trafficker.

If the Person is Drug Dependent

		Criminal History Risk Level			
		< 3 Criminogenic Needs		3+ Criminogenic Needs	
Prison	Population Type	Moderate	High	Moderate	High
Mental Health At Risk	Violent and Sexual	12.5%	12.1%	9.4%	7.7%
	Violent	52.9%	57.3%	55.6%	61.5%
	Substance Abuser	24.1%	20.6%	25.6%	17.9%
	General	0%	0%	0%	0%
Jail					
Mental Health At Risk	Violent and Sexual	3.5%	0%	3.6%	0%
	Violent	14.1%	14.3%	10.7%	15.6%
	Substance Abuser	67.1%	73.6%	71.4%	75.0%
	General	0%	0%	0%	0%

If the person is Drug Abusing....

		Criminal History Risk Level			
		< 3 Criminogenic Needs		3+ Criminogenic Needs	
Prison	Population Type	Moderate	High	Moderate	High
Mental Health At Risk	Violent and Sexual	18.6%	14.2%	12.4%	11.3%
	Violent	58.6%	61.3%	63.1%	62.5%
	Substance Abuser	16.1%	14.5%	16.4%	18.2%
	General	0%	0%	0%	0%
Jail					
Mental Health At Risk	Violent and Sexual	2.0%	3.0%	1.7%	2.4%
	Violent	21.5%	25.2%	23.2%	21.3%
	Substance Abuser	64.0%	59.2%	68.4%	60.9%
	General	0%	0%	0%	0%

Decision Rules Regarding Criminogenic Needs

Priorities for Tx

- Risk is the determining factor
 - High Risk/High Need should be prioritized first
 - Moderate Risk/High Needs should get priority
- 2 Main Needs
 - Substance Abuse Dependent (not abusers) with emphasis on opiate and cocaine addicts
 - Criminal lifestyle: peers, family involved in life of crime; no stable employment

Priorities for Low Level Tx

- Moderate Risk with moderate criminogenic needs
- Low Risk with moderate to high criminogenic

Priorities for Punishment

- Moderate Risk with few needs
- Low Risk with few needs

Program Category Placement Decision Criteria

- **Category A:** Intensive daily restrictions on behavior with 3+ hours a day in a setting; deals with High Risk and Substance Abuse Dependent or Criminal Behaviors with 3+ Criminogenic Needs.
- **Category B:** Moderate daily restrictions on behavior with services multiple times a week; deals with High Risk (<3 criminogenic needs) and Moderate Risk with 3+ Criminogenic Needs
- **Category C:** Low daily restrictions on behavior with multiple times a month services; deals with Moderate Risk with <3 criminogenic needs
- **Category D:** Weekly restrictions on behavior; for Moderate Risk and Low Risk with 3+ Criminogenic Needs or Substance Use Dependent
- **Category E:** Weekly restrictions on behavior for Low Risk with <3 Criminogenic Needs
- **Category F:** Punishment only

Male Prison Population

		Program Category Distributions						
		% of Total Population	A (22.5%)	B (29.3%)	C (29.9%)	D (13.4%)	E (3.2%)	F (1.6%)
Risk	High	20.5%	79.3%	18.1%	2.6%	0.0%	0.0%	0.0%
	Moderate	60.3%	10.5%	42.4%	47.1%	0.0%	0.0%	0.0%
	Low	19.2%	0.0%	0.0%	4.9%	69.8%	16.8%	8.5%
Drug Severity	Dependent	9.1%	40.4%	34.4%	19.1%	4.5%	1.6%	0.0%
	Abuser	70.6%	23.6%	36.9%	24.2%	11.0%	4.4%	0.0%
3 or More Criminogenic Needs	Yes	13.9%	74.3%	14.7%	6.7%	4.2%	0.0%	0.0%
Mental Health At Risk	Yes	30.4%	28.3%	29.9%	25.8%	13.3%	2.1%	0.7%
Population Type	Violent and Sexual	15.9%	20.8%	0.0%	54.5%	24.7%	0.0%	0.0%
	Violent	56.7%	31.5%	41.6%	11.3%	15.6%	0.0%	0.0%
	Substance Abuser	16.9%	4.1%	21.6%	53.5%	2.1%	15.4%	3.3%

Female Prison Population

		Program Category Distributions						
		% of Total Population	A (14.9%)	B (23.0%)	C (25.8%)	D (23.7%)	E (7.5%)	F (5.1%)
Risk	High	9.6%	76.6%	22.3%	1.1%	0.0%	0.0%	0.0%
	Moderate	51.0%	14.9%	40.9%	44.1%	0.0%	0.0%	0.0%
	Low	39.4%	0.0%	0.0%	8.0%	60.1%	19.0%	12.9%
Drug Severity	Dependent	13.3%	30.2%	33.1%	23.3%	9.5%	3.9%	0.0%
	Abuser	63.0%	15.9%	29.2%	23.9%	20.0%	11.1%	0.0%
3 or More Criminogenic Needs	Yes	20.9%	53.3%	21.6%	15.1%	10.0%	0.0%	0.0%
Mental Health At Risk	Yes	53.7%	17.6%	26.3%	23.4%	22.5%	7.0%	3.1%
Population Type	Violent and Sexual	10.7%	16.1%	0.0%	43.4%	40.5%	0.0%	0.0%
	Violent	52.0%	22.6%	31.5%	12.7%	33.3%	0.0%	0.0%
	Substance Abuser	27.3%	3.7%	18.8%	40.1%	5.7%	25.8%	6.0%

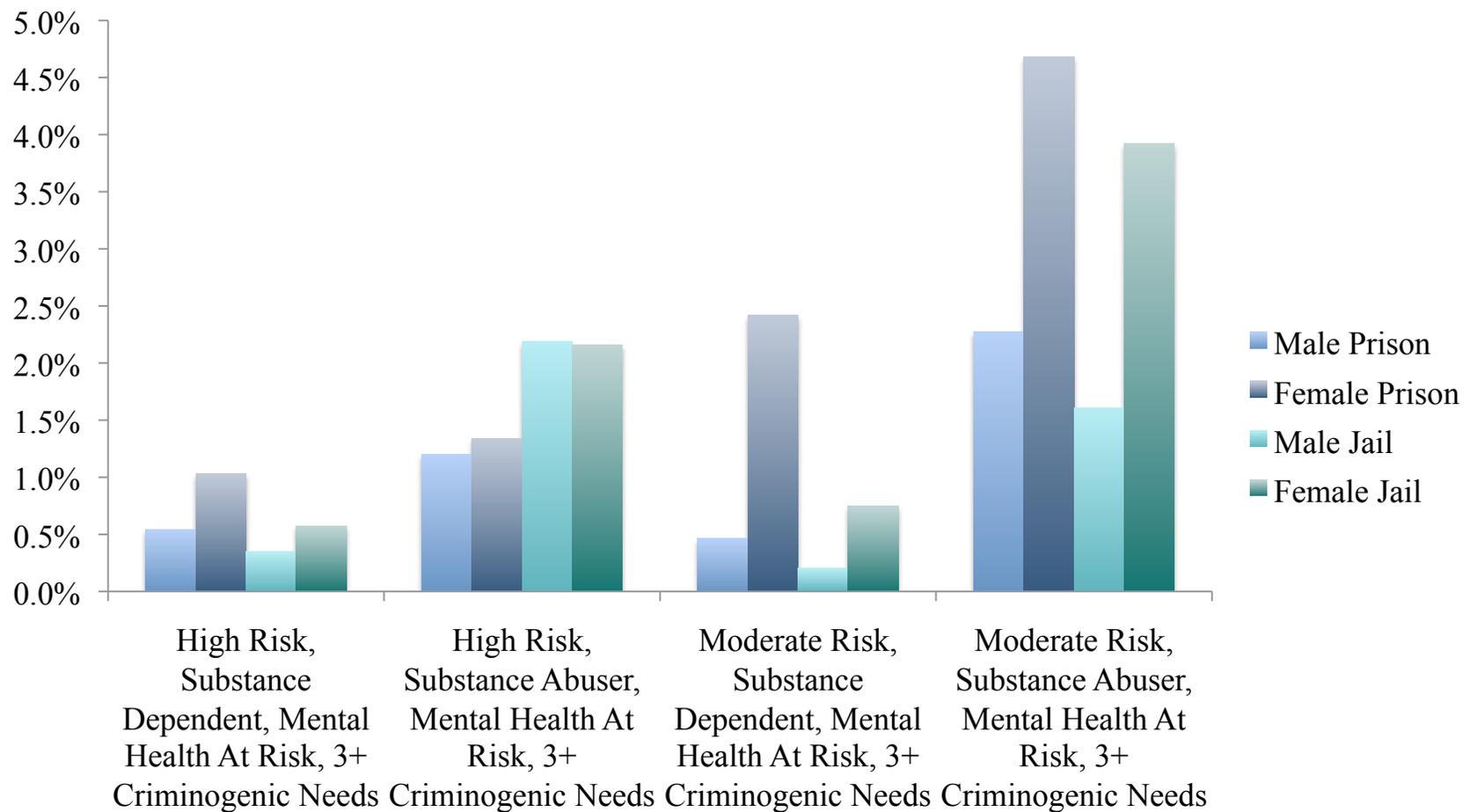
Male Jail Population

		Program Category Distributions						
		% of Total Population	A (13.4%)	B (24.4%)	C (38.1%)	D (8.8%)	E (10.0%)	F (5.4%)
Risk	High	29.7%	44.6%	48.7%	6.7%	0.0%	0.0%	0.0%
	Moderate	45.6%	3.0%	21.5%	75.5%	0.0%	0.0%	0.0%
	Low	24.7%	0.0%	0.0%	2.6%	39.2%	38.3%	19.9%
Drug Severity	Dependent	5.7%	21.5%	42.9%	26.3%	3.2%	6.1%	0.0%
	Abuser	67.0%	17.7%	32.3%	27.3%	9.0%	13.6%	0.0%
3 or More Criminogenic Needs	Yes	11.4%	61.2%	21.8%	5.6%	11.4%	0.0%	0.0%
Mental Health At Risk	Yes	28.6%	22.2%	31.9%	26.9%	8.7%	8.3%	2.0%
Population Type	Violent and Sexual	3.3%	27.8%	0.0%	30.8%	41.4%	0.0%	0.0%
	Violent	22.7%	37.3%	28.3%	8.8%	25.5%	0.0%	0.0%
	Substance Abuser	47.5%	6.3%	30.5%	38.9%	2.2%	18.2%	3.9%

Female Jail Population

		Program Category Distributions						
		% of Total Population	A (7.3%)	B (16.6%)	C (39.2%)	D (10.9%)	E (18.9%)	F (7.2%)
Risk	High	14.1%	44.2%	50.2%	5.6%	0.0%	0.0%	0.0%
	Moderate	47.4%	2.9%	20.1%	77.0%	0.0%	0.0%	0.0%
	Low	38.5%	0.0%	0.0%	4.4%	0.0%	48.5%	18.3%
Drug Severity	Dependent	8.3%	14.3%	29.6%	28.0%	10.6%	17.5%	0.0%
	Abuser	62.3%	9.2%	22.3%	28.2%	12.7%	27.6%	0.0%
3 or More Criminogenic Needs	Yes	19.4%	10.1%	21.0%	28.1%	15.1%	20.0%	5.7%
Mental Health At Risk	Yes	47.1%	1.9%	12.6%	46.3%	7.3%	23.1%	8.7%
Population Type	Violent and Sexual	.6%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%
	Violent	14.2%	24.6%	20.1%	19.5%	35.8%	0.0%	0.0%
	Substance Abuser	59.9%	6.2%	21.3%	31.3%	8.1%	29.8%	3.4%

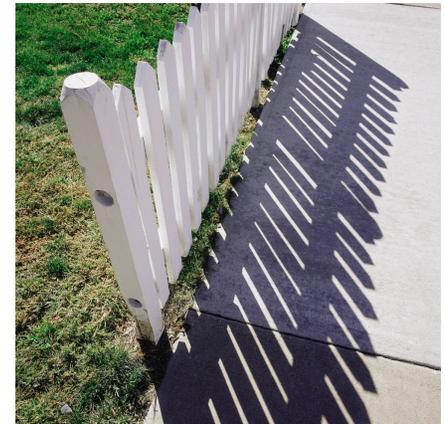
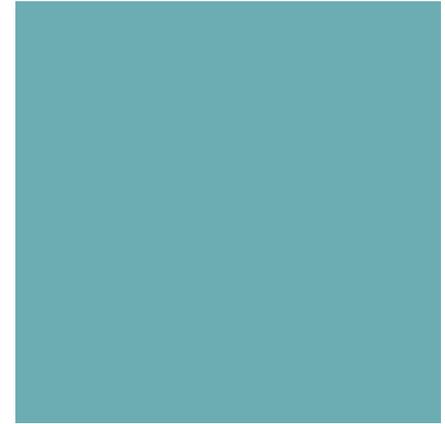
Prevalence of High Risk/Need Populations in Prisons and Jails



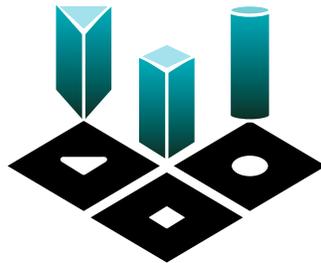


Overview

- 1 Risks and Needs in Persons with Mental Illnesses/Co-occurring
2. Risks and Needs in Persons with Substance Use Disorders/Co-occurring
3. Implications for Policy and Practice



Thank You



Center for Advancing Correctional Excellence!

Fred Osher, M.D.

Director, Health Systems
and Services Policy

fosher@csg.org

Faye Taxman, Ph.D

University Professor,

Center for Advancing
Correctional Excellence
Department of
Criminology, Law, and
Society

George Mason University

ftaxman@gmu.edu