

Roundtable Agenda

- **Introduction:** Who we are and why we engaged in this study
- **Participant Introduction:** Your name, organization, interest/expectations for the roundtable discussion topic
- **Topic Introduction:** Through a dialogue with participants, we intend to receive feedback on study findings with the ultimate goal of bridging differing perspectives and supporting the planning and implementation of joint strategies for service delivery to teens in CWS based on the Ten-Element Framework for System Linkages
- **Main points:** communicate the main ideas and sub-ideas
- **Discussion**
- **Summary & Wrap-Up**

Topic Introduction: Ten-Elements Framework*

1. Underlying values and principles of collaborative relationships
2. Daily practice: client screening and assessment
3. Daily practice: client engagement and retention in care
4. Daily practice: services to children impacted by caregivers with substance abuse disorders
5. Joint accountability and shared outcomes
6. Information sharing and data systems
7. Budgeting and program sustainability
8. Training and staff development
9. Working with related agencies
10. Working with the community and supporting families

Topic Introduction: Addressing the 10-Item Framework with the National Survey of Child and Adolescent Well-Being II

- National probability sample of US CWS-investigated cases (N=5,873 children)
- Longitudinal study – baseline data March 2008-Sept 2009 with follow-up at 18 and 36 months
- Data from children, caregivers, caseworkers/agencies, teachers, administrative records
- Sampling based on 81 within-county “primary sampling units” (PSUs)
- Sampling independent of substantiation and receipt of services
- Oversampled out-of-home placement and underrepresented groups



ELEMENT 1:

*UNDERLYING VALUES AND
PRINCIPLES OF COLLABORATIVE
RELATIONSHIPS*

Teen Substance Use Overview : Background Information for Element 1

- Adolescent substance use is a critical risk behavior associated with elevated risk for:
 - Addiction
 - Problematic use in adulthood
- Immediate health problems
 - Auto accidents; sexual risk; injury; depression & suicidality; overdose
- Long-term health problems
 - Impaired brain development & functioning; motor disorders; dependence
- Substance use starts early:
 - 27% drink alcohol by 8th grade
 - 7% report 30-day marijuana use by 8th grade, 17% by 10th
 - 10% report lifetime use of illicit drugs (not marijuana) by 8th grade

Background Information Element 1

- Risks particular to the child welfare system (CWS)
 - Maltreatment, neglect
 - Reduced caregiver monitoring
 - Intergenerational substance use
- 1/3 to 2/3 of CWS-involved children affected by substance abuse
- CWS-involved youth have higher rates of substance use disorders than general youth
- Actual prevalence of substance use among CWS youth still unknown
- No comparisons of substance use rates between CWS and general population youth

Challenge: SUD in CW Context

2/3 all CW cases involves issues of parental SUD (1-3)

Associated with adverse outcomes for children (4-6)

Adoptions and Safe Family Act, 1997 (7)

1.USGAO, 1998; 2. Wulczyn, Ernst, Fisher, 2011; 3. Young, Boles & Otero, 2007; 4. Brook & McDonald, 2007; 5. Choi & Ryan, 2006; 6. Grella, Hser, & Huang, 2006; 7.Green, Furrer, Worcel, Burrus & Finigan, 2007



Unemployment

Incarceration

Mental Health

Poverty

Isolation

Child abuse and Neglect

Housing

Child Welfare

Homelessness

Multi-needs

Families

Immigration Status

Substance Abuse

Education/special need

Interpersonal Violence

Medical Health



Employment

Homeless Shelters

Mental Health

Community Advocacy Groups

Housing

Child Welfare
Gateway to
Services

Universities

Courts

Immigration

Criminal Justice

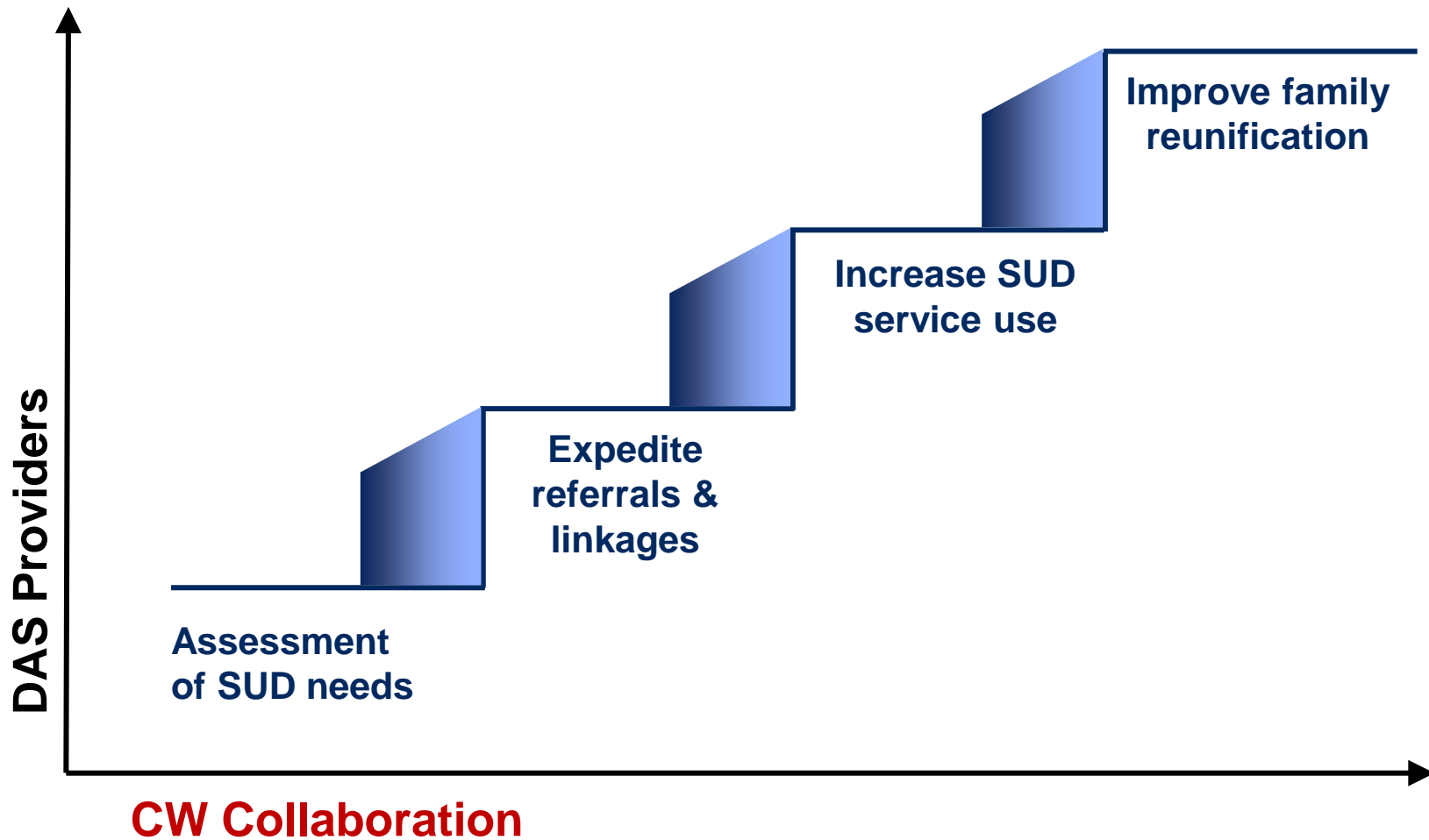
Schools

Substance Abuse Treatment

Women's Shelters

Medical Settings

Positive Outcomes: Collaboration between CW & DAS (3,7)



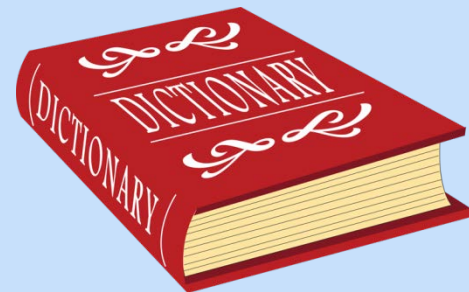
Collaboration Research Gap

- 1) Lacking clarity in conceptualization and **measurement** of collaboration⁽⁸⁾
- 2) Not **theory** driven
- 3) Limited research
 - a. **Organizational contexts** that influence collaboration
 - b. **Outcomes** connected to collaboration
 - c. **National** perspective



Gap #1: Challenges in defining collaboration

- Lack of consensus on how to measure collaboration ⁽⁸⁾
- Lack of clarity on which dimensions or processes of collaboration to measure
 - Relational
 - Strategies
 - Outcomes



8. Palinkas et al., 2014

Addressing Gap #1

Defining collaboration as:

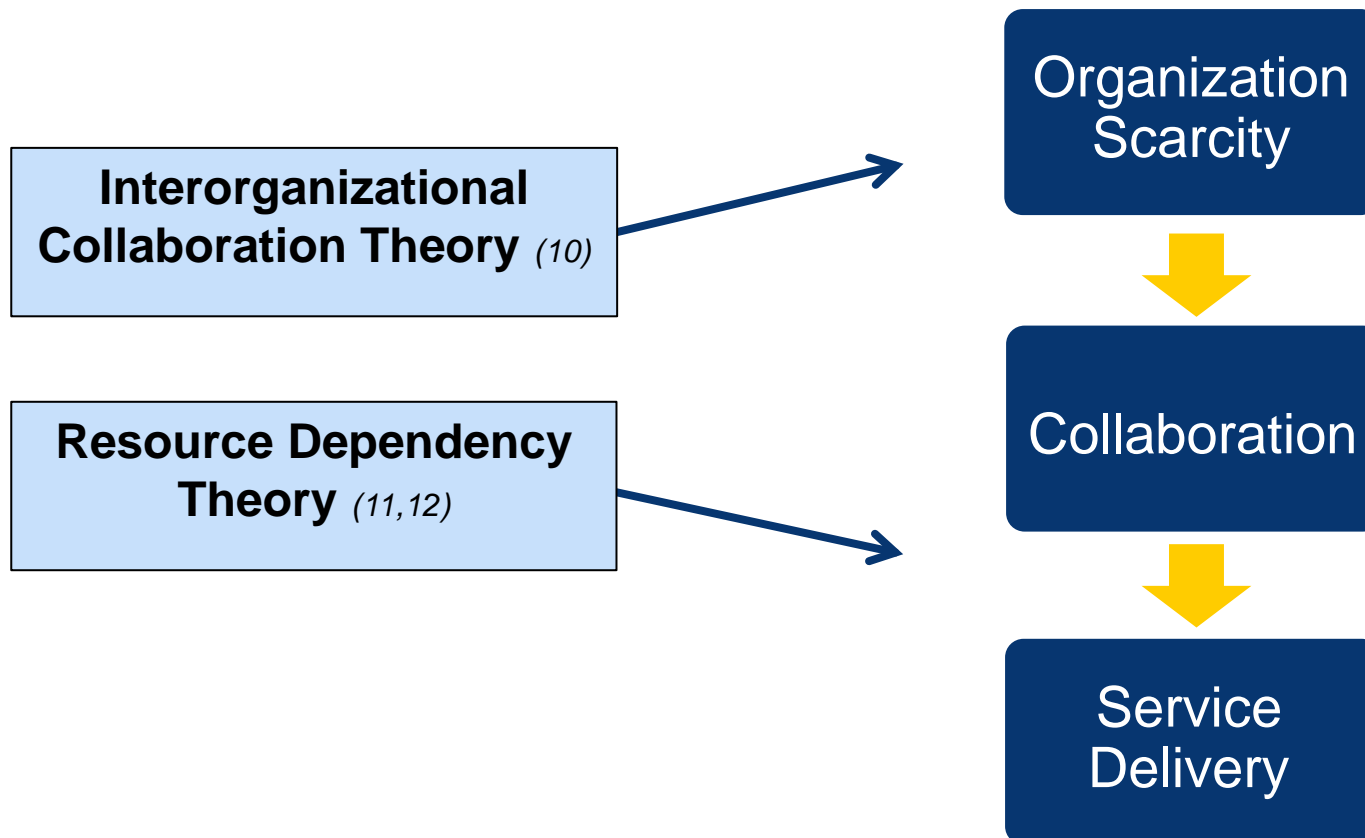
- **Joint activity** by two or more agencies working together that is intended to **increase public value by their working together** rather than separately⁽⁹⁾



9. Bardach, 1998

Organizational Theories of Collaboration

Organizations **collaborate** to address insufficiencies, and to cultivate resources and strengthen service delivery.



Organizational Theories of Collaboration

**Interorganizational
Collaboration Theory**

**Resource Dependency
Theory**

Benefits of Collaboration

Improve client outcomes



How Do We Investigate Screening Nationally?

Study 1

Goals:

1. To accurately estimate alcohol, marijuana, and illicit drug use among a nationally representative sample of CWS-involved youth
2. To compare substance use in the CWS youth population with general youth population estimates

How We Investigated Screening Nationally

- Secondary analysis of retrospective cohort data
 - CWS youth: Second National Study for Child and Adolescent Well-Being (NSCAW II)
 - General youth: 2012 National Survey on Drug Use and Health (NSDUH)
- Youth age 12-17 included
 - NSCAW II: N=884
 - NSDUH: N=17,399

How We Explored Screening Nationally

- Outcomes:
 - Lifetime use of alcohol, marijuana, and illicit drugs
 - Illicit drugs defined as cocaine, heroin, hallucinogens, inhalants, and prescription drugs
 - 30-day use of alcohol, marijuana, and cocaine
- Statistical analysis via Z-tests for rate comparisons
 - Sampling weights applied to NSCAW for prevalence estimation
 - p-values adjusted using false discovery rate controlling procedure (Benjamini & Hochberg 1995)

National Screening Results

	<i>NSCAW II</i>		<i>NSDUH 2012</i>		<i>Comparison</i>
	N	Weighted %	Weighted %	Z	Adj p-value
Lifetime Alcohol Use	403	47.1	32.4	6.3	<0.001
30 Day Alcohol Use	158	23.6	23.6	4	<0.001
Lifetime Marijuana Use	222	26.3	17	3.7	<0.001
30 Day Marijuana Use	97	12.8	7.2	2.1	0.05
Lifetime Cocaine Use	52	5.6	1.1	3.1	<0.01
30 Day Cocaine Use	24	2.4	0.1	3.6	<0.001
Lifetime Hard Drug Use	120	12.9	14.8	-0.6	NS
30 Day Hard Drug Use	28	1.9	0.2	2	NS

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National Screening Results

- CWS-involved adolescents reported greater lifetime and recent substance use than age-matched general youth.
- Specifically, CWS-involved youth were significantly more likely to report:
 - Lifetime and 30-day alcohol use
 - Lifetime and 30-day marijuana use
 - Lifetime and 30-day cocaine use
- There were no differences between CWS and general youth on lifetime use of heroin or any illicit drug (despite significant difference in lifetime cocaine use).

How Helpful is a Snapshot in Time?

Study 2

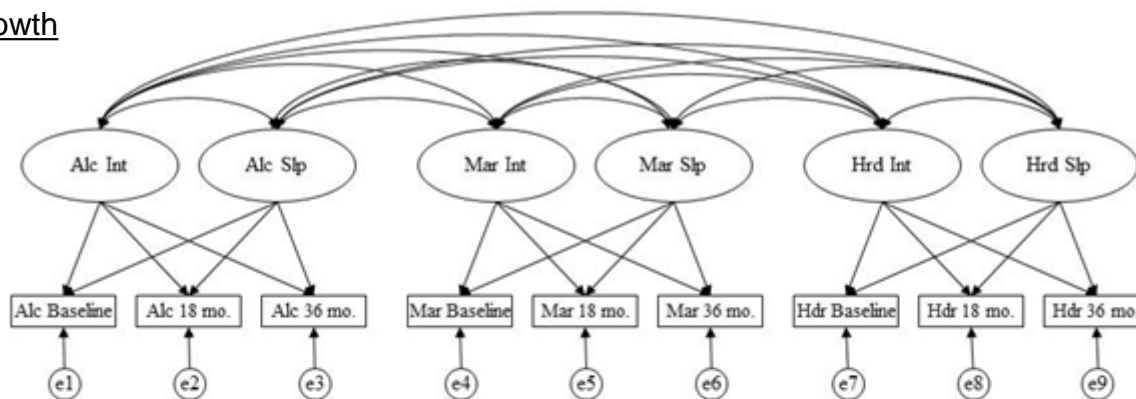
- Are there differences when we look at how substance use changes overtime for CWS involved teens?



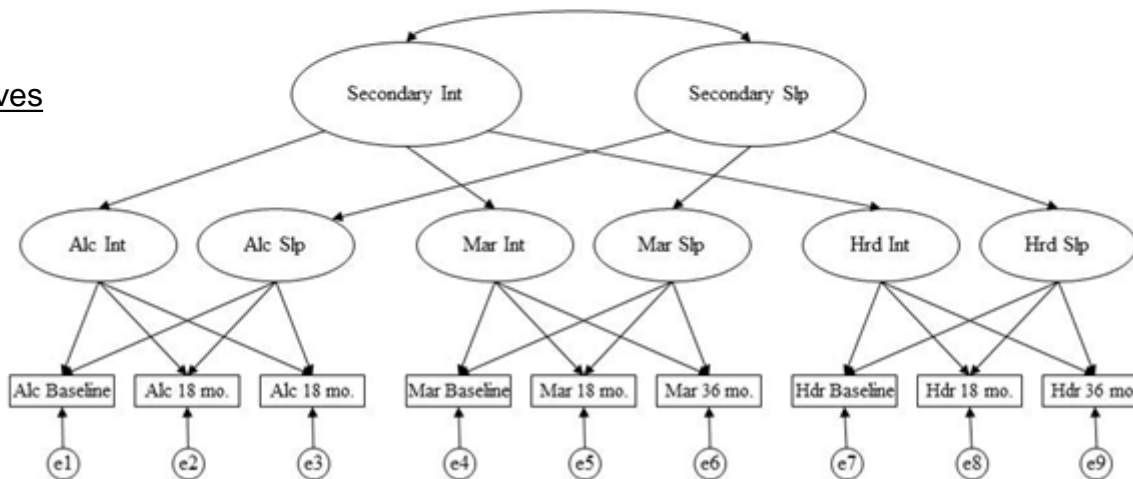
CWS Involved Teens and Drug Use Over Time

Poly Substance Use

Correlated Growth

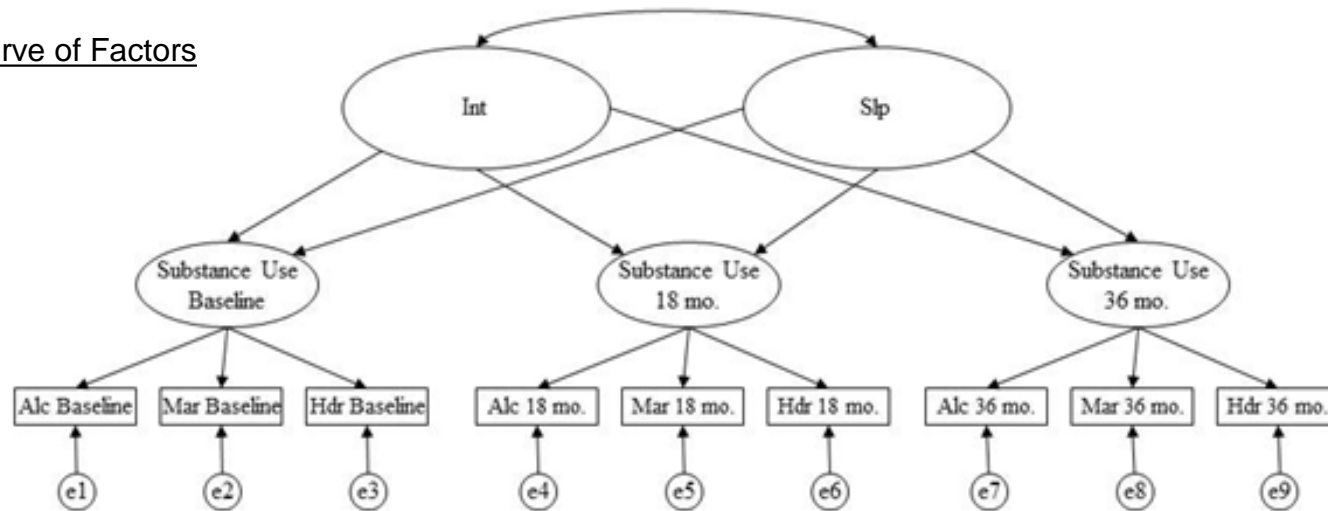


Factor of Curves



CWS Involved Teens and Drug Use Over Time

Curve of Factors



CWS Involved Teens and Drug Use Over Time

- **Assessing polysubstance use is key and looking at substance use overtime is most important**
- Significant increase in rates of marijuana use between the 18- and 36-month time points,
 - more prevalent in terms of daily use and increasing use than alcohol
- Youth who are not frequent users of substances upon entering the CWS may be at greater risk for increasing to more severe use, as opposed to more problematic use being exacerbated upon entering the system.
- Greater attention may need to be given to the later segments of adolescence or CWS involvement, given the increase in marijuana use at later points in time

Why Do Teens Engage in Polysubstance Use?

Study 3

- Correlates of Polysubstance Use
- The literature says the following may play a role:
 - Gender
 - Ethnicity
 - Age
 - Length of Time in CWS
 - Residential Status
 - Exposure to Violence

Why Do Teens Engage in Polysubstance Use?

	% or <i>M (SE)</i>		
	Baseline	18 months	36 months
Age 15+	7%	40%	69%
Residential status (out of home)	12%	12%	13%
Lifetime violence exposure (range = 0–7)	4.35 (.16)	4.23 (.15)	3.87 (.15)
Substance use (during previous 30 days)			
Alcohol	16%	24%	26%
Marijuana	9%	14%	18%
Hard drugs	3%	4%	3%

Why do Teens Engage in Polysubstance Use: Ethnicity and Gender

- **Ethnicity**

- Black teens in the current sample engaged in lower levels of polysubstance use

- **Gender**

- No gender differences



- *Thought: Maybe our current prevention efforts are working as this differs from the general teen population*

Why do Teens Engage in Polysubstance Use: Age

- **Age**

- Despite the fact that there were far fewer youth aged 15 or older at baseline (7%) than at 36 months (69%), being 15 years old or older emerged as a significant risk factor at baseline and 18 months, but not at the end point of the study.
- This highlights the dynamic nature of age as a risk factor, in support of the idea that there are certain periods during CWS involvement, in which age may be more influential on polysubstance use.
- These findings do not concur with the literature suggesting that drinking before age 15 is particularly risky for the development of alcohol problems, but rather that being older is associated with higher rates of use of alcohol and marijuana during the previous 30 days only at the beginning and middle of a youth's trajectory of involvement in the CWS.

Why do Teens Engage in Polysubstance Use: Residential Status and Violence Exposure

Residential Status

- Children in out-of-home placement were less likely to use alcohol at 36 months
- Counterintuitive to the literature!

Violence Exposure

- We conducted several exploratory interactions and found out-of-home placement was protective against later substance use for youth who had been removed from contexts with greater violence exposure
- Removing due to imminent danger may also protect against future substance use

Things to Keep in Mind

- Results based on data collection in 2008-2009
 - Preference or availability for certain substances may have shifted over time, e.g. marijuana
- NSCAW II did not measure 30-day use of most illicit drugs or lifetime use of hard drugs other than cocaine and heroin
- Self-report data may underestimate prevalence in both samples
- Statistically simple rate comparison; does not control or account for factors that may influence substance use

Examining Service Across Substance Abuse and Child Welfare Nationally

Study 4

1. To assess factors associated with receipt of drug/alcohol and other services in a nationally representative sample of CWS-involved youth
2. To examine the role of substance use context in identification of need for services



Examining Service Across Substance Abuse and Child Welfare Nationally

- Preliminary bivariate and multivariate logistic regression analysis (sample only) examined factors associated with service utilization outcomes
 - Sampling weights applied to create nationally generalizable prevalence estimation
 - A priori $\alpha=0.05$ set as criterion for statistical significance
 - All outcomes were binary (yes=1, no=0)
 - Age was modeled as a continuous variable; all others were treated as binary indicators (yes=1, no=0)
 - Nonsignificant predictors systematically removed from multivariate analysis to reach a parsimonious model for each outcome

Examining Service Across Substance Abuse and Child Welfare Nationally

- Outcomes: Child receipt of...
 - Any drug/alcohol/substance abuse services
 - Composite of child and caseworker report
 - Any emotional/behavioral services
 - Any health services
 - Any delinquency services
- Demographic predictors
 - Age, male gender (vs. female), race/ethnicity (non-Hispanic Black, Hispanic, or Other vs. white)
- Substance use covariates
 - Lifetime alcohol and hard drug use
 - Previous diagnosis with a substance use disorder
- Substance use context predictors
 - Having been sold, given, or offered drugs in the last 12 months on school property
 - Ever riding in a car with a high or drunk driver
 - Ever using drugs or alcohol to fit in, relax, or feel better
 - Ever using drugs or alcohol alone

Service Receipt Results

Variable	Mean ± SD or N (%)
Age	13.72 ± 1.87
Gender	
Female	585 (55%)
Male	471 (45%)
Race	
Non-Hispanic White	400 (38%)
Non-Hispanic Black	287 (27%)
Hispanic	254 (24%)
Other	111 (11%)
Lifetime Alcohol Use	436 (43%)
Hard Drug Use	132 (13%)
Has anyone sold/given/offered you drugs on school property	186 (18%)
Have you ever rode in a car with a drunk driver	269 (27%)
Have you ever used drugs/alcohol to fit in, relax, or feel better	137 (17%)
Have you ever used drugs or alcohol by yourself	116 (14%)
Substance Use Disorder	198 (20%)
Any Drug and Alcohol Services	161 (15%)
Any Emo/Beh/Att Services	440 (42%)
Any Health Services	99 (9%)
Any Delinquency Services	130 (12%)

Service Receipt Results

<u>Predictor</u>	<u>Drug/Alcohol/ Substance Use</u>			<u>Emotional/Behavioral</u>			<u>Health</u>			<u>Delinquency</u>		
	<i>OR</i>	<i>95% CI</i>	<i>P-value</i>	<i>OR</i>	<i>95% CI</i>	<i>P-value</i>	<i>OR</i>	<i>95% CI</i>	<i>P-value</i>	<i>OR</i>	<i>95% CI</i>	<i>P-value</i>
Age	1.08	1.00-1.03	0.01	1.04	0.99-1.03	0.26	1.05	1.00-1.02	0.10	1.17	1.13-1.48	<.001
Gender (Male)	1.19	0.86-1.65	0.29	1.15	0.9-1.47	0.27	1.09	0.72-1.65	0.69	0.87	0.6-1.26	0.45
Non-Hispanic Black	1.27		0.13	1.27	0.94-1.72	0.13	0.99	0.59-1.66	0.97	1.26	0.81-1.96	0.30
Hispanic	0.79		0.15	0.79	0.57-1.09	0.15	0.91	0.52-1.57	0.73	0.71	0.42-1.2	0.21
Other	1.00		0.99	1.00	0.65-1.53	0.99	0.94	0.45-1.96	0.88	1.12	0.6-2.08	0.72
Lifetime Alcohol Use	1.42	1.02-1.98	0.04	1.06	0.83-1.35	0.66	1.00	0.66-1.51	1.00	1.16	0.8-1.67	0.44
Lifetime Hard Drug Use	3.25	2.16-4.87	<.001	1.52	1.06-2.2	0.02	1.77	1.04-3.03	0.04	2.84	1.82-4.44	<.001
Sold, given, or offered drugs in the last 12 months on school property	3.37	2.33-4.86	<.001	1.28	0.93-1.77	0.13	1.19	0.71-2.01	0.51	1.95	1.27-2.97	0.002
Have you ever rode in a car with a high/drunken driver	2.98	2.11-4.2	<.001	1.28	0.97-1.7	0.08	1.19	0.75-1.89	0.47	2.05	1.39-3.01	<.001
Have you ever used drugs/alcohol to fit in, relax, or feel better	3.64	2.4-5.49	<.001	1.65	1.14-2.39	0.01	1.47	0.83-2.61	0.19	2.97	1.9-4.63	<.001
Have you ever used drugs/alcohol by yourself	4.07	2.64-6.27	<.001	2.27	1.52-3.39	<.001	2.01	1.14-3.55	0.02	4.09	2.6-6.46	<.001
Substance Use Disorder	3.64	2.54-5.23	<.001	1.55	1.13-2.11	0.01	1.28	0.77-2.13	0.33	3.80	2.56-5.63	<.001

Service Receipt Results

Significant predictors of receiving drug/alcohol/substance abuse services included:

- Being given/sold/offered drugs on school property (OR=1.78, 95% CI 1.12-2.82, $p=0.02$)
- Riding in a car with someone high or drunk (OR=1.87, 95% CI 1.16-3.03, $p=0.01$)
- Using drugs or alcohol by oneself (OR=2.10, 95% CI 1.24-3.57, $p=0.006$)
- Lifetime hard drug use was only nearly significant after controlling for the other variables in the model (OR=1.61, 95% CI 0.97-2.69, $p=0.07$)

Service Receipt Results

- Significant predictors of receiving emotional/behavioral services included:
 - Using drugs or alcohol by oneself (OR=2.27, 95% CI 1.52-3.39, $p<0.001$)
 - No other predictors were significantly associated with this outcome
- Significant predictors of receiving health services included:
 - Lifetime hard drug use (OR=1.77, 95% CI 1.04-3.03, $p=0.04$)
 - No other predictors were significantly associated with this outcome
- Significant predictors of receiving delinquency services included:
 - Using drugs or alcohol by oneself (OR=2.34, 95% CI 1.23-4.47, $p=0.01$)
 - Child age (OR=1.22, 95% CI=1.08-1.38, $p=0.01$)
 - Substance use disorder was only nearly significant after controlling for the other variables in the model (OR=1.74, 95% CI 0.96-3.15, $p=0.07$)

Element 3 Conclusions

- CWS-involved adolescents who reported using drugs or alcohol alone were significantly more likely to receive substance use, emotional/behavioral, and delinquency services
- Contextual effects were more strongly associated with service utilization than traditionally documented “risk factors” such as child age or history of substance use alone
- Significant associations between substance use alone and increased likelihood of service utilization may reflect appropriate caregiver or caseworker acknowledgment and treatment of concerning substance use behavior among CWS involved youth

Limitations to Keep in Mind

- Results based on data collection in 2008-2009
 - Patterns of substance use, diagnostic criteria, and criteria for service availability may have shifted over time, e.g. with the introduction of DSM-V
- NSCAW II did not measure 30-day use of most illicit drugs or lifetime use of hard drugs other than cocaine and heroin
 - May be missing a class of high risk substance users as a result
- Self-report data is subject to recall bias and may underestimate prevalence of both predictors and outcomes
- There was substantial missingness on two key context variables, so results may not generalize to entire population

Research Questions

Study 5

What organizational resources support/hinder collaboration between CW and DAS agencies?

Study 6

Does collaboration impact availability of SUD assessment resources in CW agencies?

Study 7

Does collaboration strengthen receipt of SUD services for CW-involved caregivers?

Data

- National Survey of Child and Adolescent Well-Being (**NSCAW II**): 2008–2011
- Current study used baseline data:
 - ❖ Local agency director interviews (N = 87) (collaboration activities and organization characteristics)
 - ❖ Caregiver reports of SUD problems
 - ❖ Caseworker report on caregivers' receipt of SUD services (N = 1,651)

Measures

- Collaboration, count variable ranging from 0 to 4 (sum of following):
 - ❖ Memorandum of Understanding (MOU)
 - ❖ Cross-training
 - ❖ Co-located staff
 - ❖ Shared budgeting

- Availability of SUD Resources in CW agencies, count variable ranging from 0 to 4 (sum of following):
 - ❖ Formal SUD assessment tool (yes/no)
 - ❖ SUD specialists for investigations (always/sometimes v. rarely/never)
 - ❖ Availability of SUD treatment services (not adequate/adequate)
 - ❖ Priority status arrangement for CW-involved clients

- Receipt of SUD treatment services (dichotomous)
 - ❖ Received formal SUD assessment (yes/no)
 - ❖ Referred to SUD services (yes/no)
 - ❖ Received SUD treatment services (yes/no)

Analyses: Weighted Models

- Analytics weights were used throughout the analyses to correct for the effects of unequal probabilities of selection, and adjusted for nested and missing data.
 - National estimates of CW agencies and caregivers in US
- Negative binomial: **intensity** of collaboration and **availability** of resources (count outcomes)
- Logistic regression: **receipt** of SUD services (assessment, referral, or treatment; dichotomous outcome)

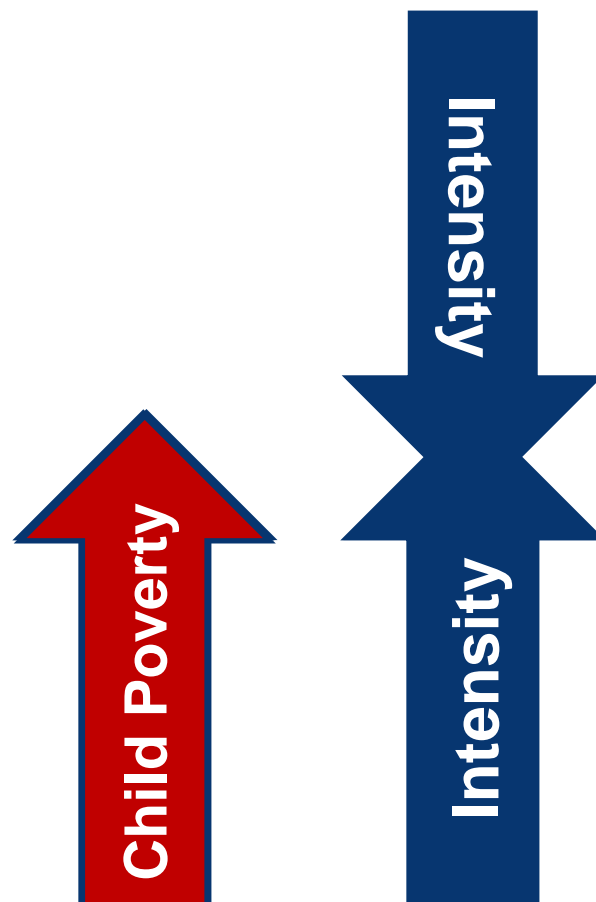
* STATA 13 used for all analyses

Descriptives: Collaboration

Engagement in Collaboration Activities

Collaboration Activities	<i>N</i> = 85	Weighted %
MOU	55	60.1
Cross-Training	40	41.4
Co-located Staff	20	28.5
Joint Budgeting	25	28.5
MOU ONLY	29	39.1
Intensity of Collaboration		
0 Types of Collaboration	8	12.7
1 Type of Collaboration	42	47.5
2 Types of Collaboration	14	12.1
3 Types of Collaboration	14	23.8
4 Types of Collaboration	7	3.9

What organizational resources support/hinder collaboration between CW and DAS agencies?



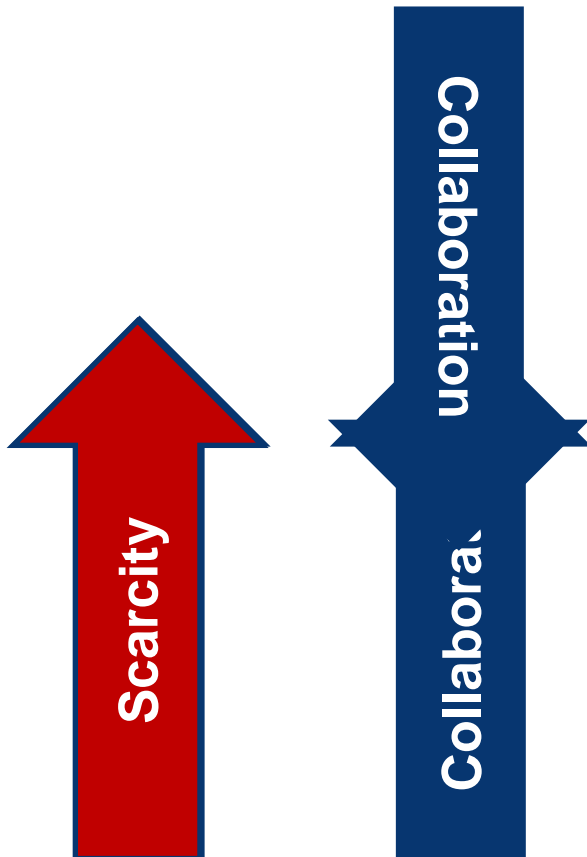
IRR = 0.98
95% CI = 0.92, 0.98

Incidence Rate Ratio (IRR)

What Does it All Mean?

Findings **contrary**
Organizational Theories
of Collaboration

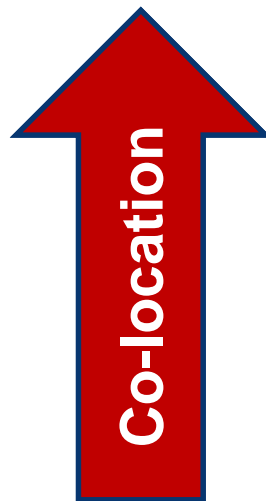
- High caseload: collaborate to relieve service burden
- Collaboration as a tool to address intractable contexts, e.g. high caseloads in CW



Descriptives: Availability of SUD Resources

	Weighted %
SUD specialist available for investigation (always or sometimes)	42.94
Formal SUD assessment tool available for investigation (yes)	31.84
SUD treatment services available for families (adequate)	31.88
Priority arrangements with SUD providers (yes)	59.12

Does collaboration impact availability of SUD assessment resources in CW agencies?



IRR = 1.69
95% CI = 1.02, 2.59

Incidence Rate Ratio (IRR)

What Does it All Mean?

- Findings reflect low availability of SUD-related resources for CW staff members.
 - Concerning, particularly during the initial phases of maltreatment investigations, CW workers trained primarily on child safety and not identification of SUD needs.

- Collaboration activities (e.g. MOU or co-location) associated with greater availability of SUD resources
 - MOU may provide legal parameters that allow SUD specialists to be part of investigation
 - Co-located DAS staff members may play multiple roles, e.g. accompany CW to investigations

Descriptives: Receipt of SUD Services

	<i>Unweighted N</i>	<i>Weighted %</i>
<i>Analytic Sample</i> Caregivers at high risk of SUD problems	1,651	23.93
Caregiver receipt of SUD services		
Received assessment	989	46.76
Received referral	1,125	52.34
Received services (<i>of those referred</i>)	691	72.32

Does collaboration strengthen receipt of SUD services for CW-involved caregivers?

Engagement of individual collaboration:

MOU (OR = 1.69; 95% CI = 1.12, 2.55)

Co-location (OR = 1.69; 95% CI = 1.12, 2.55)

- Higher odds of being referred to SUD services

SUD Resources:

SUD assessment tool (OR = 2.28; 95% CI = 1.40, 3.71)

- Higher odds of receiving formal SUD assessment

SUD priority status (OR = 5.85; 95% CI = 2.16, 15.84)

- Higher odds of receiving SUD treatment services

What Does it All Mean?

- Engagement in multiple kinds of collaborative activities previously found to improve outcomes for CW-involved families
- Study findings shed light as to which collaboration activities may have more impact in improving receipt of services
 - E.g., MOU and co-location associated with referral to SUD treatment
- **Future implication:** targeted collaboration activities to increase SUD resources for CW workers and families
 - E.g. Develop SUD assessment tools that are user friendly to CW staff
 - ACA bringing parity to SUD, collaboration efforts to increase access to SUD benefits and services

Implications

- Targeted collaboration activities to increase SUD resources for CW workers and families
- Develop SUD assessment tools that are user friendly to CW staff
- Affordable Care Act (ACA) bringing parity to SUD, develop collaboration efforts to increase access to SUD benefits and services
- ACA: many more individuals now qualify for SUD treatment benefit (12% more of general population qualified), but gap in availability SUD specialist or treatment facilities to meet this need.
 - Suggestions to address this?



ELEMENTS 5-10:

DISCUSSION



SUMMARY AND WRAP-UP



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