The Service Process Adherence to Needs and Strengths (SPANS): Extending the CANS

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Enhancing the Child and Adolescent Needs and Strengths (CANS)

- The SPANS
  - ◆ Extends the CANS to address how well services and supports address identified needs and strengths.
  - ◆ Uses the CANS modular structure so that flexibility is maintained.
  - ◆ Can provide feedback at the individual, program or system level to identify training gaps, as well as resource gaps

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Child & Adolescent Needs & Strengths (CANS)*

- **Decision support for treatment and service planning**
- **Monitor outcomes (less intensive needs, greater strengths) over time**
- **Communication tool to provide a common language for professionals and families**

*Lyons, Sokol & Lee, 1999

CANS

- **Needs - Child or family needs identified through the CANS as requiring action (2 or 3) are in the plan**
- **Child and family strengths are identified through the CANS as areas to build on (0 or 1) are in the plan**

Needs and strengths are evidenced in progress notes, other documentation or interview

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CANS Domains & items

Functioning	Substance Abuse	Other Risk Behaviors	Mental Health Needs
Intellectual/Dev	Severity of Abuse	Danger to Self	Psychosis
Physical/Medical	Duration of Use	Other Self Harm	ADHD/Impulse
Family	Stage of Recovery	Runaway	Depression/Anx.
School[1] Achieve.	Peer Involvement	Social Behavior	Anger Control
School Behavior	Parental Involve.	Danger to Others	Oppositional
School Attendance		Sexually Abusive	Antisocial
Sexual Dev.			Adjustment

CANS Domains & items

Care Intensity	Child Safety	Caregiver Capacity
Urgency	Abuse	Physical
Monitoring	Neglect	Supervision
Treatment	Permanency	Involvement with Care
Transportation	Exploitation	Knowledge
Service Performance	Victimization	Organization
		Resources
		Residential Stability
		Transportation

Could the CANS have another use?

Could it be used to monitor quality?

Development of the Service Process Adherence to Needs & Strengths (SPANS)

- Developed to meet a need for system accountability in decentralized systems
  - ◆ Allegheny County, Pittsburgh PA System of Care Grant Site
  - ◆ Sitka, Alaska, Alaska Youth Initiative
- Both sites were using the Child and Adolescent Needs and Strengths (CANS) for decision-support, to monitor outcomes and for a common language.

- **Developed by David Sliefert as quality assurance tool & modified by Mary Beth Rauktis**
- **Used as part of a record review**

SPANS Process

- **Review the Record**
- **Complete the CANS**
- **Transfer CANS scores to the SPANS**
- **Review the record to examine how services and supports were provided to address needs (scores = 2 or 3) or build strengths (scores = 0 or 1).**
- **Record whether progress was made in each need or strength item.**

Example of SPANS Scoring - Needs

Circle the letter in each column that provides the best explanation.

Do this for every CANS item identified as a '2' or '3'.

Key:

M (Mostly – score of 2); P (Partially – Score of 1); R (Rarely – Score of 0)

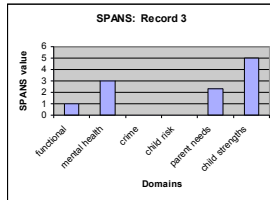| CANS Rating & Dimension (Mental Health)	A Child needs a focus of TX plan	B Services & supports in TX plan	C Needs discussed in progress notes	D Services & supports in progress notes	E Services & supports led to positive progress
2 Anger Control	M P R	M P R	M P R	M P R	M P R

Pilot Test

- Five Records
- Using the SPANS we identified unmet service and support needs in individual records
- Also identified unmet system needs (e.g. psychiatric time)
- Identified key training areas (e.g. using strengths in plans)

Pilot Data – Sample Results

SPANS: Record 3

- In Record 3, Parent needs were a focus of the first plan.
- Opportunities for improvement would be to revise the next plan to include child strengths

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Taking it to scale

- The SPANS was used in an evaluation of Behavioral Health Overlay Services – services provided to youth in child welfare and juvenile justice group homes.
- The study was undertaken to better understand the characteristics of youth served, service provision, as well as the cost and outcomes of care.
- The case records of a random sample of youth served in these programs statewide were reviewed.

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Study Design

- The treatment records of a random sample of children and youth receiving services were selected.
- The sample was stratified by whether a child is in a child welfare or juvenile justice placement, size of the facility (small, medium, and large) and for racial / ethnic balance.

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Demographics

		Juvenile Justice N=101		Child Welfare N=97	
Gender	Female	25	24%	41	42%
	Male	76	76%	56	58%
Race/Ethnicity	White	52	52%	49	51%
	Black	49	48%	42	43%
	Latino	13	13%	10	10%
	Other	3	3%	11	11%
Age	Mean (Med)	SD		Mean (Med.)	SD
	15.7 (16)	1.7		13.3 (14)	2.7

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Method

- Implementation / Fidelity- For each domain, items were summed within each domain and divided by the number of valid responses in that domain. Each domain has a score of 1 to 5, with '1' indicating low fidelity and '5' indicating high fidelity to treatment plan recommendations.

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Sample findings
CANS Substance Abuse Complications
Percent with 2s and 3s

	JJ (n=101)	CW (n=97)	F; p
Severity of Abuse	57%	10%	75.8; p<.01
Duration of Abuse	50%	7%	103.5; p<.01
Stage of Recovery	55%	10%	32.9; p<.01
Peer Involvement in Substance Use	50%	9%	50.7; p<.01
Parental Involvement in Substance Use	53%	41%	8.0; p<.05

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SPANS Substance Abuse Complications Fidelity

	CW (n=32)		JJ (n=73)	
No fidelity	19	59.4 %	13	17.8%
Low	3	9.4%	6	8.2%
Partial	8	25.0%	13	17.8%
Moderate	0	0%	18	24.7%
High fidelity	2	6.3%	23	31.5%

$X^2=27.07; p<.001$

Caregiver Needs & Strengths Percent with 2s and 3s

	CW [1] (n=var)	JJ (n=var)	$X^2;p$
Physical	10%	15%	12.3; p<.01
Supervision	38%	45%	nsd
Involvement with Care	47%	31%	nsd
Knowledge	33%	35%	nsd
Organization	19%	14%	nsd
Resources	44.6%	35%	12.8; p<.01
Residential Stability	13%	14%	nsd
Transportation	12.7%	4%	nsd

[1] Ns range from 37-55 due to TPRs

Caregiver Needs and Strengths Fidelity

	CW (n=var)		JJ (n=var)	
No fidelity	21	61.8%	38	59.4%
Low	8	23.5%	13	20.3%
Partial	4	11.8%	10	15.6%
Moderate	1	2.9%	0	0%
High fidelity	0	0%	3	4.7%

nsd

Relationship of fidelity to outcomes

- In all domains, there was a positive relationship between fidelity to the treatment plan and the degree of progress the child made while in treatment. That is, outcomes improve as fidelity increases.

Instrument revisions

- Adding a section to the SPANS so the needs and strengths of children and youth could be distinguished from those of their parent / caregiver
- Adding a 'implementation' codes, that indicate whether services were implemented as intended, so that barriers to service provision can be systematically addressed.

Next steps

- Further explore the relationship between fidelity and outcomes using more stringent measures and for a larger number of cases (n = 300)

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