Dual Diagnosis and the Mental Health Parity Problem: Weaving High-Quality Medical, Psychiatric, and Developmental Support Into Better Care for Patients and New Standards for Health Systems





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# Neuropsychiatric risk in children with intellectual disability of genetic origin: IMAGINE, a UK national cohort study



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	Familial	de novo	p value	
Emotional disorders	78/529 (14·7%)	40/492 (8·1%)	0.0010	
Anxiety	77/529 (14·5%)	40/492 <b>(</b> 8·1%)	0.0013	
Depression	5/529 (0·9%)	1/492 (0·2%)	0.12	
Behavioural disorders	101/529 <b>(</b> 19·1% <b>)</b>	49/492 (10.0%)	<0.0001	
Oppositional defiant disorder	96/529 <mark>(</mark> 18·1%)	48/492 (9.8%)	0.0001	
Conduct disorder	13/529 (2.5%)	4/492 (0·8%)	0.040	
Hyperactivity disorder	145/529 (27·4%)	69/492 (14%)	<0.0001	
Autism spectrum disorder	242/529 (45·7%)	141/492 (28.7%)	<0.0001	

Data are n (%) or mean (SD). Threshold of significance corrected for multiple comparisons using the Bonferroni correction method  $\alpha$ =0.002. General physical health was estimated using primary caregivers' ratings on the DAWBA (5 point Likert scale from very bad to very good). IMD quintile 1=most deprived, 5=least deprived. See appendix (p 29) for summary of n numbers. IMD=index of multiple deprivation. ABAS-3=Adaptive Behaviour Assessment System 3. SDQ=Strengths and Difficulties Questionnaire. DAWBA=Development and Well-Being Assessment. \*Calculated using  $\chi^2$  test of independence. †Calculated using two-sample Kolmogorov–Smirnov test. ‡DAWBA skip rules affect number of responses. §The developmental quotient was calculated from primary caregivers' estimates of the child's mental age divided by their chronological age (0=low developmental level, 1=high developmental level).

Table 3: Copy number variant group participant characteristic comparison by variant inheritance

### The Evidence Base in Child Mental Health

Requires transdisciplinary implementation of what is proven effective, including case management, family and/or social service support when necessary



### Intervention relevant to both DD and BH

- Positive Behavior Support
- Functional Communication Training
- Case Management
- In-home support
- Psychopharmacologic Intervention
  - Impulse Control
  - Mood Stabilization
  - Behavioral Rigidity
  - Aggression

**Summary** Interventions that are commonly implemented in the IDD service sector (e.g., functional communication training and positive behavioral support planning) are capable of mitigating severe behavioral impairment, yet rarely invoked when dual diagnosis patients are seen in the psychiatric service sector. Conversely, state-of-the-art interventions for traumatic stress, pharmacotherapy, and psychotherapy have proven capable of improving behavioral impairments in IDD but are typically restricted to the psychiatric service sector, where there exist significant barriers to access for patients with IDD, including limitations imposed by diagnostic eligibility and practitioner experience. Bridging these gaps in knowledge and clinical capacity across the respective IDD and PS service sectors should be of very high priority in strategizing the care and support of IDD patients with serious co-occurring psychiatric conditions.

### Consequences of non-comprehensive treatment

- Low impact on adaptive functioning
- Languishing in scenarios of inadequate support
- Ineffective expenditures over years of time
- Injury, Traumatic Experience
- Incarceration / Placement
- Emergency Room Visits
- Delays in maturation

EXCESS COST POORER OUTCOME

#### REVIEW



#### Neurologic complications of Down syndrome: a systematic review

Jonathan D. Santoro<sup>1,3</sup> · Dania Pagarkar<sup>1</sup> · Duong T. Chu<sup>4</sup> · Mattia Rosso<sup>5</sup> · Kelli C. Paulsen<sup>2,3</sup> · Pat Levitt<sup>6</sup> · Michael S. Rafii<sup>1,3,7</sup>

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#### Journal of Neurology

#### Table 1 Literature review data by topic

Main topic	Total articles col- lected	Total articles excluded by title or duplicate	Total articles reviewed at abstract level	Total articles reviewed in full	
Hypotonia	41	15 (37%)	26 (63%)	16 (39%)	
Intellectual and learning disability	2598	2140 (82%)	458 (18%)	47 (1.8%)	
Cervical instability	140	72 (51%)	68 (49%)	26 (19%)	
Autism spectrum disorder	372	212 (57%)	160 (43%)	37 (10%)	
Epilepsy	322	178 (55%)	144 (45%)	45 (14%)	
Cerebrovascular disease	87	49 (56%)	38 (44%)	20 (23%)	
Alzheimer's disease	1237	361 (29%)	876 (71%)	57 (5%)	
Neuropsychiatric disease	99	69 (70%)	30 (30%)	24 (24%)	

### Down Syndrome Disintegrative Disorder: A Clinical Regression Syndrome of Increasing Importance

Mattia Rosso, MD,<sup>a</sup> Ellen Fremion, MD,<sup>b</sup> Stephanie L. Santoro, MD,<sup>c,d</sup> Nicolas M. Oreskovic, MD, MPH,<sup>c</sup> Tanuja Chitnis, MD,<sup>a</sup> Brian G. Skotko, MD, MPP,<sup>c,d</sup> Jonathan D. Santoro, MD<sup>a,f</sup>

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**TABLE 1** Characteristics of DSDD

Criterion	Features
I	Autistic regression
II	Cognitive decline resulting in a dementia-like state
III	Older age at onset than at autistic regression
IV	No other diagnosis that may explain the condition

Adapted from Worley G, Crissman BG, Cadogan E, Milleson C, Adkins DW, Kishnani PS. Down syndrome disintegrative disorder: new-onset autistic regression, dementia, and insomnia in older children and adolescents with Down syndrome. *J Child Neurol.* 2015;30(9):1147–1152.

Clinical Feature	% ( <i>n/N</i> )
Language regression <sup>5,11,12</sup>	87 (42/48)
Partial	38 (18/48)
Mutism	52 (25/48)
Catatonia <sup>2,5,11,12</sup>	47 (25/53)
Mood symptoms <sup>2,5,12,13</sup>	
Depression	42 (21/50)
Social withdrawal	34 (15/44)
Anxiety	16 (8/50)
Insomnia <sup>4,5,11,12</sup>	43 (25/58)
Aggression <sup>2,5,11,13</sup>	42 (17/40)
Delusions or hallucinations <sup>4,5,11</sup>	14 (8/56)
Anorexia <sup>11,12</sup>	12 (5/43)

**TABLE 2** Clinical Features Reported in DSDD

Authors, Year	Design	Patient Population	Summary of Results
Rollin, <sup>6</sup> 1946	Case series	17 cases of DS with catatonic psychotic living in	Description of a period of behavioral agitation followed by decompensation
		an institution	characterized by incontinence, mutism, apathy, social withdrawal,
			occasional behavioral outbursts, and psychosis eventually leading to
			catatonia
Kerbeshian and	Case series	5 cases of DS and Tourette's syndrome, 1 case	Description of new-onset insomnia, autism, and loss of cognitive skills in
Burd, <sup>7</sup> 2000		of childhood disintegrative disorder and DS	a patient with DS
Prasher, <sup>8</sup> 2002	Case series	357 patients with DS	DSDD regression is severe and gradual, lasting 2 y and followed by
			a chronic plateau; regression affected language, social, and cognitive
			domains
Castillo et al. <sup>14</sup>	Case-	24 patients with DS and autism	50% (12 of 24) of patients with DS and autism lost previously acquired
2008	control		language, social skills, and communicative abilities; language loss
	study		occurred later in DS with autistic regression than in isolated autistic
	otady		regression (62 vs 20 mo)
∆kahoshi et al <sup>12</sup>	Case series	13 young adults with DS with acute	Patients with DS presented with depression obsessive-compulsive
2012	0000 001100	neuronsychiatric symptoms	hebaviors delusions and hallucinations
Worley et al <sup>4</sup> 2015	Case series	11 natients with DSDD	Late mean age of onset of DSDD (mean $-114$ y); autism was new in onset
Worldy of al, 2010	0000 00100	The patients with DODD	in 8 of 11 patients and worsened in 3 of 11 patients: $91\%$ (10 of 11)
			notionta had accinitive decline: a 200/ (0 of 11) patients had now apart
			patients had cognitive decline; soz% (9 of 11) patients had new-onset
Observeddin star 2	0	A patients with DQ and patheonics	
Ghaziuddin et al,	Case series	4 patients with US and regression	Regression was accompanied by motor symptoms, including catatonia;
2015			recovery after a therapy with benzodiazepines and EGI
Jacobs et al, "	Case report	Young adult male with DS	19-y-old patient presents with severe clinical deterioration; the patient
2016			presented with low mood, difficulty concentrating, anxiety, and motor
-			symptoms
Mircher et al, <sup>5</sup>	Case series	30 patients with DS and regression	Regression was seen at all levels of cognitive functions; regression was
2017			characterized by partial or total loss of activities of daily living;
			regression was associated with other psychiatric symptoms, which
			included catatonia, depression, delusions, and stereotypical behaviors;
			regression was preceded by severe emotional stress in all patients

**TABLE 3** Studies of Patients With Clinical Phenotypes Similar to DSDD

#### Neuropsychiatric Disease and Treatment

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CASE SERIES

## Catatonia in Down syndrome; a treatable cause of regression

Neera Ghaziuddin<sup>1</sup> Armin Nassiri<sup>2</sup> Judith H Miles<sup>3</sup>

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Symptom	Case I (NK)	Case 2 (CU)	Case 3 (SH)	Case 4 (BN)	Published case*	Published case*	
Motor activity	Reduced	Reduced	Mixed	Reduced	Reduced	Reduced	
Mood	Labile	Labile	Silly, irritable	Perplexed	Labile	Irritable	
Anxiety/depression	±	No	No	±	Yes	No	
Psychosis	No	Unclear	No	No	Yes	No	
Aggression	No	No	Yes	No	No	SIB	
Cognition	Impaired	Impaired	Impaired	Impaired	Impaired	Impaired	
Stereotyped behaviors	Yes	Yes	Yes	Yes	Yes	Yes	
Unusual movements	Yes	Yes	Yes	Yes	Yes	Yes	
Decline in ADL	Yes	Yes	Yes	Yes	Yes	Yes	

Table 2 Presenting symptoms in six cases with Down syndrome and catatonia

Note: \*Data from Jap and Ghaziuddin.<sup>22</sup> ±, possible.

Abbreviations: ADL, activities of daily living; SIB, self-injurious behaviors.

Catatonia: A behavioral syndrome marked by an inability to move normally, arising from a disturbed mental state. It may involve repetitive or purposeless over-activity, or whole-body rigidity, resistance to passive movement, and loss of speech.

	Down syndro	me ( <i>N</i> = 49)	Intellectua		
	N	%	N	%	X <sup>2</sup> (1), p
Psychosis NOS	17	35%	9	13%	6.46**
Depression with psychosis	4	8%	0		5.33*
Depressive disorders	7	15%	7	10%	.12
Bipolar disorder	2	4%	20	29%	14.34***
Anxiety disorders <sup>a</sup>	9	18%	7	10%	.20
Impulse control disorder <sup>b</sup>	10	20%	27	38%	4.59*

Table 2 Number and percentages of primary psychiatric diagnoses in Down syndrome versus other ID groups

\*p < .05; \*\*p < .01, \*\*\*p < .001.

<sup>a</sup> Anxiety disorders included obsessive-compulsive disorder (DS = 4; ID = 2) with remaining diagnoses reflecting generalized anxiety disorder and one case of separation anxiety.

<sup>b</sup>Impulse control disorder included five participants with both ADHD and impulse control disorders (DS = 2, ID = 3). Depressive disorders consisted of major depressive episodes, with one case of dysthymic disorder in the ID group.



## **Dual Diagnosis**

X

- Intellectual Disability
- Autism Spectrum Disorder
- Receptive / Expressive Language Delay
- Sensorimotor Impairment
  - Visual Impairment
  - Hearing Impairment
  - Physical Disability

- Aggression (Intermittent Explosive Disorder)
- Anxiety (Generalized Anxiety Disorder)
- Depression / SIB (Major Depressive Disorder)
- Substance Use Disorder
- Mood Instability (Bipolar Disorder)
- Psychosis (Schizophrenia)
- Personality Disorder
- Impulse Control Disorder (ADHD)

 $= 4 \times 9 = 36...$ 

• Post-traumatic Stress Disorder

Glossary	
Adaptive function	"The child's performance across socialization, communication, and daily living domains" [9]. Deficits in adaptive function may be influenced by symptoms of a condition but differ from symptoms in that they relate to general aspects of maturity and homeostasis that allow an individual to direct the course of his/her own behavior, pursue goals, maintain safety, contribute to the community through work and social interaction, and engage in fulfilling interpersonal relationships
Functional behavior assessment	Involves evaluation of the behavior and of the antecedent and consequences associated with the behavior. An assessment analyzes the precipitants of the behavior and proposes hypotheses about factors that control the behavior. The information gathered guides the intervention by altering conditions so that the desired behaviors are shaped and reinforced [10]
Functional communication training	Functional communication training involves teaching a socially appropriate communicative response that serves the same function as a problem behavior and therefore serves as a substitute for problem behavior. A functional analysis is conducted to identify the environmental events that serve as reinforcers for the problem behavior and the conditions that evoke problem behavior. A socially appropriate communicative response is selected and taught with prompting and a schedule of reinforcement that results in the appropriate response replacing the problem behavior. An example of this would include training a child to say, "help please" when engaged in a difficult task rather than screaming [11•]
Neurotypical	Exhibiting or characteristic of typical neurological development; i.e. pertaining to individuals who are not affected by a neurodevelopmental disorder
Noncontingent reinforcement without extinction	Includes the delivery of a reinforcer on a time-based schedule that does not depend on the individual's adaptive or maladaptive behavior. For example, noncontingent reinforcement without extinction may involve allowing an individual to access preferred items every 30 s, irrespective of the individual's behavior, and without any specific contingency for the preferred item that would operate to extinguish a maladaptive behavior [12]

Title	Land outhor Voor Citation	Intervention modelities
	number in reference list	Intervention modalities
IDD and aggression		
Aggression in autism spectrum disorder: presentation and treatment options	Fitzpatrick et al. Neuropsychiatric Disease and Treatment 2016 [2]	-Functional behavioral assessment -Reinforcement strategies -Functional communication training
Shaping complex functional communication responses	Ghaemmaghami et al. Journal of Applied Behavior Analysis 2018 [36]	-Shaping -Functional communication training -Complex functional communication responses
Noncontingent reinforcement without extinction plus differential reinforcement of alternative behavior during treatment of problem behavior	Fritz et al. Journal of Applied Behavior Analysis 2017 [12]	<ul> <li>Noncontingent reinforcement without extinction</li> <li>Differential reinforcement of alternative behavior</li> </ul>
Meta-analysis of noncontingent reinforcement effects on problem behavior	Richman, et.al, <i>Journal of</i> <i>Applied</i> <i>Behavior Analysi</i> s 2015 [38]	-Positive behavior support planning
Effects of mindfulness-based positive behavior support (MBPBS) training are equally beneficial for mothers and their children with autism spectrum disorder or with intellectual disabilities	Singh et al. Frontiers in Psychology 2019 [39]	-Mindfulness to reduce perceived psychological stress for both caregivers and children with IDD -Positive behavior support
Pharmacologic treatment of severe irritability and problem behaviors in autism: a systematic review and meta-analysis	Fung et al. <i>Pediatrics</i> 2016 [41]	-Risperidone -Aripiprazole
Effect of parent training vs parent education on behavioral problems in children with autism spectrum disorder: a randomized	Bearss et al., JAMA 2015 [42]	-Behavioral parent training

clinical trial

 Table 2
 Listing of selected clinical trials and systematic reviews, publication dates 2014–2019, documenting evidence for specific intervention modalities for ASD/ID and aggression, depression, or addictions

#### IDD and Depression

Multidisciplinary assessment and treatment of self-injurious behavior in autism spectrum disorder and intellectual disability: integration of psychological and biological theory and approach Catatonia in Down syndrome: systematic approach to diagnosis, treatment and outcome assessment based on a case series of seven patients Non-pharmacological interventions for adults with intellectual disabilities and depression: a systematic review

Comparison of behavioral activation with guided self-help for treatment of depression in adults with intellectual disabilities: a randomized controlled trial Minshawi et al. J Autism Dev Disord 2015 [47<sup>•</sup>]

Miles JH et al. Neuropsychiatr Dis Treat 2019 [52]

Hamers et al. Journal of Intellectual Disability Research 2018 [55]

Jahoda et al. Lancet Psychiatry 2017 [56]  Applied behavior analysis (ABA)-based positive behavior supports
 Psychopharmacologic intervention

-Pharmacotherapy and electroconvulsive therapy (ECT)

-Cognitive behavioral therapy
-Behavioral therapy
-Exercise intervention
-Social problem-solving skills program
-Bright light therapy
-Individual psychological interventions:

BeatIt and StepUp

#### Table 2 (continued)

Title	Lead author; Year; Citation number in reference list	Intervention modalities
Adapting cognitive behavioral techniques to address anxiety and depression in cognitively able emerging adults on the autism spectrum	Kerns et al. Cognitive and Behavioral Practice 2016 [57]	-Cognitive behavioral therapy
IDD and addictions		
Acceptance and commitment therapy for problematic internet pornography use: a randomized trial	Crosby et al. <i>Behavior</i> <i>Therapy</i> . 2016 [60]	-Acceptance and commitment therapy
Efficacy of short-term treatment of internet and computer game addiction: a randomized clinical trial	Wölfling et al. JAMA Psychiatry 2019 [59]	-Short-term, manualized cognitive behavioral therapy, specifically adapted for internet/computer game addiction
Treating patients with co-occurring autism spectrum disorder and substance use disorder: a clinical explorative study	Helverschou et al. <i>Substance</i> <i>Abuse:</i> <i>Research and Treatment</i> 2019 [61]	<ul> <li>Cognitive behavioral therapy</li> <li>Monthly ASD education and group supervision to therapists in substance use clinics</li> </ul>
A feasibility randomized controlled trial of extended brief intervention for alcohol misuse in adults with mild to moderate intellectual disabilities living in the community; the EBI-LD study	Kouimtsidis et al. <i>Trials</i> 2017 [63]	-Manualized motivational enhancement therapy incorporating principles of CBT



FIGURE 2. Most recent intelligence quotient score as of age 8 years among children with autism spectrum disorder for whom test data were available, by sex and race/ethnicity — Autism and Developmental Disabilities Monitoring Network, nine sites,\* United States, 2014



Intellectually disabled range (IQ ≤70)

Abbreviations: ASD = autism spectrum disorder; F = female; IQ = intelligence quotient; M = male.

\* Includes nine sites (Arizona, Arkansas, Colorado, Georgia, Maryland, Minnesota, New Jersey, North Carolina, and Tennessee) that had intellectual ability data available for ≥70 of children who met the ASD case definition (n = 3,714).

#### ADDM Network Surveillance Data

- Overall ASD prevalence per 1,000 children aged 8 years became equal across race in 2006 birth cohort
- Disproportionate burden of cognitive impairment has been consistent across 2006, 2008, and 2010 birth cohorts. For the 2010 birth cohort, the percentages of children with ASD with IQ scores ≤70 were 49.8%, 33.1%, and 29.7% among Black, Hispanic, and White children, respectively (Maenner et al., 2021)
- Most recent median age of diagnosis: 50 months; 44 months for children with IQ<70</li>

#### Key References

Baio et al., MMWR Surveill Summ. 2018 Apr 27;67(6):1-23. Maenner et al., MMWR Surveill Summ. 2020 Mar 27;69(4):1-12. Maenner et al., *MMWR Surveill Summ. 2021 Dec 3;70(11):1-16.* Constantino et al. Pediatrics 2020 Sep;146(3):e20193629.

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	N	Mean	SD	N	Mean	SD	Ν	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Age at Diagnosis (in months)	52	29.6	5.4							_						_			42	87.4	51.8	157	25.4	4.2			
Age at Vineland-3	50	28.9	5.2	20	48.1	6.2	14	29.4	5.5	14	48.6	5.7	6	28.0	6.0	6	46.7	7.5	41	109.8	50.9	157	25.9	5.1	27	49.6	18.5
Vineland Composite Score	50	65.6	12.0	20	65.0	13.2	14	65.4	14.8	14	65.6	12.9	6	71.2	7.8	6	63.3	15.1	41	71.3	9.1	135	62.4	12.4	27	65.6	11.6
Vineland Communication	50	57.0	18.7	20	60.3	21.8	14	54.8	21.9	14	59.3	21.8	6	<del>/</del> 1.2	7.0	6	<b>6</b> 2.5	23.5	41	72.3	12.3	135	61.4	13.5	27	62.0	17.0
Vineland Daily Skill	50	73.5	15.8	20	71.9	13.2	14	74.1	17.6	14	72.6	11.3	6	77.3	11.5	6	70.3	18.0				135	53.9	21.8	27	67.1	16.9
Vineland Socialization	50	66.7	12.0	20	63.5	16.3	14	67.9	13.3	14	65.8	13.4	6	66.5	15.5	6	58.0	22.2				135	67.8	15.7	27	67.6	12.0
Vineland Motor Skill	50	82.3	12.3	20	77.5	17.9	14	81.9	16.4	14	82.0	12.3	6	82.0	9.4	6	67.0	25.3				132	68.6	14.0	27	72.4	10.5
Age at Mullen	41	30.8	6.3	20	49.9	7.6	13	29.5	4.03	12	49.6	7.5	6	26.5	6.3	6	49.5	9.2				131	27.9	5.1	28	49.6	5.4
Mullen Early Learning Composite Score	40	57.2	14.3	19	61.1	15.2	13	53.6	8.37	12	60.7	14.0	6	61.0	9.7	6	64.0	18.9				131	57.9	11.4	28	57.8	16.4
Raven*				5	84.0	12.1		$\mathbf{A}$			$\mathbf{A}$								16	86.3	23.5						
IQ Proxy (DAS/Raven/Mullen/PPVT)																			41	77.4	20.3						
Age at ADIR				16	49.0	5.2				12	48.9	4.5				4	49.3	7.6							16	46.9	3.4
ADIR Social				16	16.3	7.1				12	17.8	6.1				4	11.8	9.1							16	13.8	5.2
ADIR Communication				16	11.8	3.1				12	11.3	2.2				4	13.3	5.2							15	17.1	5.6
ADIP Papatitiva Pabaviar				16	4.2	1.0				12	4.5	2.3				4	3.0	2.2							15	11.3	3.2

\* Average of 5 hours per week for 9 months

- --"Intervention group" was substantially more impaired at baseline and gained an average of 7 points on Mullen
- --One third of the children in both groups improved substantially on Mullen over the course of follow-up
- --On Vineland Composite, 1 out of 5 controls improved (the others LOST ground); 5 out of 12 intervention kids improved.

#### Two-Generation Psychiatric Intervention in the Prevention of Early Childhood Maltreatment Recidivism

John Nicholas Constantino, M.D., Vered Ben-David, Ph.D., Neha Navsaria, Ph.D., T. Eric Spiegel, M.D., Anne L. Glowinski, M.D., M.P.E., Cynthia E. Rogers, M.D., Melissa Jonson-Reid, Ph.D.

#### American Journal of Psychiatry 173 (6) 566-573, 2016





A Comprehensive Approach to Unmet Mental Health Needs of Preschool Children in Foster Care

Evidence-Based Parenting Education (IY Groups) Clinical Care Coordination Parental Psychiatric Care Judicious Clinical Appraisal / Pacing of Visitation Medical recommendations for SAFE reunification

#### 10-year continuous follow-up, State of Missouri

Table 1. Re-entry rates after first episode of Court custody by disposition.

Data Source	Center for State Ch	ild Welfare Data <sup>1</sup>	Children's Bureau	Missouri <sup>2**</sup>	SYNCHRONY				
	2003-2010		2019		2010-2021				
	N = 607,289* (271,	347 ages 0-5)	N = 5,773	(	N = 400				
			46% reunified		46% reunified				
			19% guardianship		22% guardianship				
			24% adopted		32% adopted				
			10% other						
	Guardianship	Reunification	Guardianship	Reunification	Guardianship	Reunification			
Age at time of exit	cases	cases	cases	cases	cases	cases			
0-12 months	17%	36%	NA NA						
1-2 years	16%	33%	NA	NA	3.4% 7.1%				
3-5 years	19%	30%	NA						
0-17 years	17%	27%	16.	2%	NA	NA			
Note: Proportion of case	os evneriencina re-en	try following dispo	sition seareaated b	disposition type					

\* Data are unavailable for exit types "adoption" and "other."

\*\* Data are unavailable separated by age or disposition; children under five likely have proportionately higher re-entry rates than older children as evidenced by the Center for State Child Welfare Data.

Comparison of Re-entry Rates for Center for State Child Welfare Data vs. SYNCHRONY

Guardianship: OR 7.51 (95%CI: 2.38, 23.76), X<sup>2</sup> = 16.35, p < .0001

Reunification: OR 6.11 (95%CI: 3.48, 10.75), X<sup>2</sup> = 51.62, p < .0001

Comparison of Re-entry Rates for Children's Bureau vs. SYNCHRONY

All exits: OR 3.09 (95%CI: 1.86, 5.15), X<sup>2</sup> = 20.93, p < .0001

1. The Center for State Child Welfare Data. Reentry to Foster Care: Identifying Candidates Under The Family First Act. 2019.

2. Children's Bureau. Reentry into Foster Care.; 2019. https://cwoutcomes.acf.hhs.gov/cwodatasite/fourTwo/index.

#### Constantino et al., in press Pediatrics

#### **3-5-FOLD REDUCTION IN CHILD ABUSE/NEGLECT RECIDIVISM**

AUTISM SPECTRUM DISORDERS (ES BRODKIN, SECTION EDITOR)

### Toward Actionable Practice Parameters for "Dual Diagnosis": Principles of Assessment and Management for Co-Occurring Psychiatric and Intellectual/Developmental Disability

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https://link.springer.com/article/10.1007/s11920-020-1127-8

Current Psychiatry Reports, February 2020 Issue



Missouri Alliance for Dual Diagnosis



MO Alliance for Dual Diagnosis Clinical Decision Support App







*Extension for Community Healthcare Outcomes* 

## **NOT SCHOOL** OF MEDICINE

- Move knowledge, not people...
- Case-based learning
- <u>https://echoautism.org/moadd/</u>

## Identification of missed opportunity

(Biopsychosocial approach to person-centered support)

- Absence of <u>history</u>
- Fundamental lapses in migration of guardianship / decision-making
  - (near-complete "dis-integration" of the rapeutic strategy of DMH and DSS)
- Incorporation of "identity" into a coherent positive behavior support plan
- Major gaps in application of evidence-base <u>psychiatric</u> intervention
  - Medication trials
  - Specific evidence-based psychotherapies
- Rift in <u>alliance</u> between guardians and intervention team
- Unintended recapitulation of trauma
- Neglect of <u>functional communication training</u>
- Underutilization of "<u>co-registration</u>" in DD and BH service streams

### Parameterizing the Mental Health Parity Problem

Selected examples of Non-Quantitative Treatment Limitations (NQTLs) specified by the *Strengthening Behavioral Health Parity Act* (SBHPA, H.R. 7539), which constitute violations of mental health parity if proven different between medical and mental health services within an insurance network.

--"examples of how specific evidentiary standards may be applied to each service category or classification of benefits" (a7Cv)

---"examples of methods of determining appropriate types of NQTLs pertaining to medical management standards based on medical necessity or appropriateness, or whether a treatment is experimental or investigative" (a7Cil) ---"examples of methods of determining factors used in provider reimbursement methodologies (such as service type, geographic market, demand for services, and provider supply, practice size, training, experience, and licensure) as such factors apply to network adequacy"(a7Ciill)

--"examples of methods of reaching appropriate coverage determinations for new mental health or substance use disorder treatments, such as evidence-based early intervention programs for individuals with a serious mental illness" (a7Cvii)

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		How often does this		How often should this	Is the service	Are there adequate	
	Psychiatric Diagnosis	condition occur in the population of the insurance pool?	Which evidence-based interventions are medically indicated for this condition?	service be rendered to keep the population mentally healthy?	occurring as often as would be expected for known prevalence	numbers of providers in- network to meet the need?	Does the insurer cover the cost of this service?
	Diagnostic Indication for Medically-Necessary (Evidence- based) Service	Annual Incidence (Per 1,000 Covered Lives)	Medically-Necessary Evidence-Based Service	Expected Encounters/Yr Per 1,000 Covered Lives	Proportion of expected encounters per 1,000 covered lives ACTUALLY DELIVERED	Proportion of provider slots (work RVUs) necessary to meet expected demand that are actually available	Proportion of true cost of service, inclusive of care coordination, that is covered by insurer
Example:	Major Depressive Disorder, F32	71	Management of established patient, CPT 99214	426	?	?	?

#### Path to Ecosystem Transformation, GA Child Mental Health



Module 5: Early Substance Use Disorder

Module X: (covered at poor quality): Inpatient Hospitalization

## THANK YOU

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