

Do Children on Medicaid in the Land of Enchantment Satisfy Criteria for Neuropsychological Medical Necessity?

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Proposed Legislation:

- Legislate a 12-unit neuropsychological evaluation, which includes testing, scoring, interpretation, and report writing (20- to 30-page reports):
 - $90791 \times 1 + 96101 \times 1 + 96118 \times 10 = 12$ units
 - 90837×1 (for feedback to family) = 1 unit
- ICD-10-CM Diagnoses:
 - No restrictions, since diagnosis is one of the primary purposes of neuropsychological evaluations.
 - We cannot ignore diagnostic findings that might be uncovered during the evaluation process.
 - Would a surgeon *leave in* cancerous tissue not spotted on the MRI?
 - Would a plumber *not tell you* about a gas leak identified during in-depth inspection?

Table 1. Random clinical sample of Medicaid youths referred for neuropsychological testing in southern NM

	N	Mean	Median	Mode	SD	Min	Max
Age	219	11.09	11.00	8	3.88	2	18
FSIQ	208	78.87	78.50	73	13.42	40	124
ABAS	196	75.91	73.00	69	17.46	40	120
		%				%	
Unintended pregnancy		84.6		Mom abused pregnant		28.6	
Mom smoked pregnant		28.0		Mom drank pregnant		30.7	
Speech delays		46.0		Walking delays		16.4	
Speech therapy		41.3		Occupational therapy		21.6	
Special education		39.0		Psych hospital		22.6*	
Juvenile justice		46.4*		White		22.2	
Mixed ethnicity/race		10.1		Person of color		67.6	

FSIQ = Full-Battery Wechsler IQ (WISC-IV, WISC-V, or WAIS-IV); ABAS = General Adaptive Composite score from the Adaptive Behavior Assessment Scale (2nd or 3rd Edition), caregiver-report.
 "Mom abused pregnant" = mom was physically, sexually, and/or psychologically abused during the pregnancy.
 "Psych hospital" = 1 or more placement in a psychiatric hospital or residential treatment center.
 "Juvenile justice" = youth spent time in juvenile detention and/or was assigned a juvenile probation officer.
 "Speech delays" = no understandable single words by age 2 years and/or no understandable short sentences by age 3 years.
 "Walking delays" = did not walk by age 1 ½ years.
 "Mixed ethnicity/race" = youth had 1 white parent and 1 parent who was a person of color.
 *Among youths age 13-19 years.

Table 2. Clinically referred NM Medicaid youth statistics versus known population parameter estimates

	NM Medicaid youth statistics	Population parameter estimates
	Mean (SD)	
FSIQ (p <.0001 ; Cohen's d = -1.57)	78.87 (13.42)	100 (15)
ABAS (p <.0001 ; Cohen's d = -1.38)	75.91 (17.46)	100 (15)
	%	
Unintended pregnancy	84.6	37, 49, 49, 51
Mom abused pregnant	28.6	4-8, 5.2, 3.7
Mom smoked pregnant	28.0	12.2, 14, 17
Mom drank pregnant	30.7	37, 50, 40
Speech delays	41.3	2.3-19
Walking delays	16.4	1
Special education	39.0	13
Juvenile justice	46.4*	2-3

*Among youths age 13-18 years.

	Medicaid	Non-Medicaid			
	Mean (SD)	Mean (SD)	t (df)	p-value	ES
FSIQ	78.87 (13.42)	87.35 (15.43)	3.92 (257)	<.0001	0.77
ABAS	75.91 (17.46)	82.28 (18.99)	2.33 (248)	.021	0.36
	%		Chi-sq. (df)	p-value	ES
Unintended pregnancy	84.57	58.97	13.01 (1)	<.0001	.247
Mom abused pregnant	28.57	15.09	3.99 (1)	.046	.125
Mom smoked pregnant	28.0	15.1	3.69 (1)	.055	.121
Mom drank pregnant	30.73	20.75	2.05 (1)	.152	.089
Speech delays	46.03	31.48	3.68 (1)	.055	.120
Walking delays	16.42	3.70	5.81 (1)	.016	.151
Special education	39.0	21.82	5.65 (1)	.017	.144
Juvenile justice*	46.43	12.50	9.04 (1)	.003	.289
Psych hospital*	22.62	4.17	4.21 (1)	.040	.197
White	22.22	35.85	4.18 (1)	.041	.127
Mixed ethnic/race	10.14	5.66	1.01 (1)	.314	.062
Person of color	67.63	58.49	1.57 (1)	.211	.078

“ES” = effect size (Cohen’s d for FSIQ and ABAS; Phi for all subsequent categorical variables).
 *analyses run for youths age 13-19 (4 non-Medicaid youths are 19; 18 is the oldest Medicaid youth).

	Speech therapy				
	Mean	Median	Mode	Min	Max
FSIQ	75.39	74.50	73	40	124
ABAS	73.32	71.50	53	40	118
	Occupational therapy				
FSIQ	74.85	74.00	69	40	124
ABAS	73.14	70.50	58	40	107
	Special education				
FSIQ	72.31	72.00	70	40	124
ABAS	68.54	66.50	60	40	103
	Psychiatric hospitalization				
FSIQ	76.58	74.00	70	50	110
ABAS	70.49	67.00	56	46	110
	Juvenile justice involvement*				
FSIQ	77.46	78.00	70	56	105
ABAS	73.25	68.00	63	48	115

*age 13-18 years