



**THE AUTISM CRISIS:
RESEARCH AND COST
ANALYSIS OF PROVIDING
THERAPY AND THE
POTENTIAL SAVINGS TO THE
STATE THROUGH THIRD
PARTY CARRIERS**

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The Autism Crisis: Research and Cost Analysis of Providing Therapy and the Potential Savings to the State through Third Party Carriers

Background

Autism spectrum disorder (ASD) is a complex developmental disability. Signs of the disorder usually appear during early childhood and affect a person's ability to communicate and interact with others. ASD is defined as a certain set of behaviors and is a "spectrum condition" that affects individuals differently and to varying degrees. Pervasive Development Disorder (PDD) falls on the spectrum as well. There is no known single cause of autism. Early diagnosis and intervention is key to improved outcomes for the child.

Autism statistics from the Centers for Disease Control and Prevention (CDC) identify around 1 in 68 children as on the autism spectrum. This is a ten-fold increase in the last 40 years. Boys are more likely to be diagnosed with autism. The CDC estimates 1 out of 42 boys and 1 in 189 girls are diagnosed with autism in the US.

Studies show early intervention can significantly improve a child's development and help them reach their full potential. (Autism Speaks) Applied behavior analysis (ABA) therapy is widely recognized as the most effective, evidence-based treatment for autism. ABA therapy involves one-on-one interaction between the behavior analyst and the participant. ABA is provided under the direction of a Board Certified Behavior Analyst (BCBA) and Board Certified Assistant Behavior Analyst (BCaBA). They work closely with families and educators and apply principles of ABA to teach language, social, self-help, academic, daily living and life skills. Each plan treatment is unique to each child. (Behavior Analysis Certification Board, BACB.com)

The South Carolina Medicaid program, called Healthy Connections, is administered by The South Carolina Department of Health and Human Services (SCDHHS) and pays medical bills with State and Federal money for the low income and disabled citizens of South Carolina.

Third Party Liability (TPL) refers to the responsibility of parties other than Medicaid to pay for health care costs. Medicaid is always the payer of last resort, which means that Medicaid will not pay a claim for which someone else may be responsible until the party liable before Medicaid has been billed. For the most part, this means providers are responsible for billing primary health insurance before billing Medicaid.

In 2007, The SC Department of Health and Human Services and The SC Department of Disabilities and Special Needs received approval to offer the Pervasive Developmental Disorder (PDD) Waiver as an option. (DDSN.gov) This waiver has limited enrollment. This waiver covered the treatment of autism through Applied Behavioral Analysis Therapy (ABA).

On July 7, 2014, The Centers for Medicaid and Medicare Services (CMS) released an informational bulletin pertaining to Medicaid coverage for children with Autism Spectrum Disorder (ASD). Per this bulletin, coverage for autism related services like Applied Behavior Analysis (ABA) would be available under the State Plan instead of the Pervasive Developmental Disorder (PDD) Waiver. SCDHHS was responsible for developing policies and procedures to implement the change required by CMS. In May, 2015 SC Medicaid began covering ABA therapy through an interim State Plan.

Problem Statement

The purpose of this project is to ensure that SC Medicaid is the payer of last resort for the treatment of autism claims to include ABA therapy claims.

For years the treatment of autism was non-covered by the private health insurance market, therefore SC Medicaid allowed these types of claims to bypass all TPL editing. Things have changed and many insurance plans now cover the treatment of autism. Behavior Interventions such as ABA therapy can cost between \$40,000 and \$60,000 per year per child. (CDC)

Therefore, it was determined that these ABA therapy claims should indeed receive TPL editing and be removed from TPL exemption list. This would be a significant cost avoidance for the taxpayers of the State of SC. Allowing these claims to receive TPL editing is crucial to the success of this project.

The South Carolina Code §43-7-440(B) requires Medicaid providers to cooperate with SCDHHS in the identification of any third-party resource that may be responsible for payment of all or part of the cost of medical services provided to a Medicaid beneficiary.

SCDHHS also offers the Health Insurance Premium Payment program (HIPP). The HIPP program is a cost containment initiative that maintains premium payments for Medicaid beneficiaries who retain their private health insurance when it is cost effective to do so. The HIPP program was offered to the family when the child was approved to receive ABA therapy through the interim State Plan. A packet of information about the HIPP program was also mailed to each beneficiary at the time of approval of interim State Plan services.

Data Collection and Data Analysis

In February, 2016 we reviewed twelve months of ABA therapy claims that paid as primary (with no consideration of TPL) where there was an active policy on file, and this report totaled more than 37,000 claim lines and the amount paid by SC Medicaid was \$3.5 million. Many of these children have health insurance that cover these services. The decision was made to launch a recovery project on these paid claims that did not consider TPL and to also work to remove these codes from the TPL exemption list. The claims should receive editing for TPL.

The above mentioned paid ABA claims were reduced to those Medicaid beneficiaries with policies that cover ABA therapy. We selected those children with State Health Plan, Tricare, Anthem Blue Cross and Highmark Blue Cross and pulled those claims (9,768 claim lines) that paid in the past year. There are more plans that cover but these were the major carriers at the time. Also, a list of plans that offer autism treatment (Appendix A) as a covered benefit was started and this list was provided to the HIPPP specialists.

Implementation

The TPL Recovery Project began in April, 2016. Each ABA provider was mailed a letter along with a list of their paid ABA therapy claims (May, 2015 to February, 29, 2016). These claims should have been filed to primary insurance before submitting to Medicaid. We asked these providers to submit the claims to the primary carrier. We asked the providers to send in any denial or payment to SCDHHS by May 23, 2016. Our TPL Contractor implemented this ASD TPL project for us. In most cases, commercial insurance requires a prior authorization for ABA therapy and will not cover these claims unless the services are authorized. Therefore, many of these claims denied for lack of authorization.

For the next months, these providers received this letter along with the previous month's claims that paid as primary when there was indeed health insurance.

The work continued with the claims processing area and the program area established TPL editing for ABA therapy claims. In July, 2016 ABA therapy providers started to receive TPL editing for those children with active health insurance. Finally, after many meetings the TPL editing was in place.

Also, the monthly TPL Recovery project began to shrink after the implementation of the editing. In July, 2016 there were 637 children approved for autism treatment through the PDD Waiver and 738 children through the interim State Plan for a total of 1372 children approved for services. Due to a current provider shortage, not all of these children are receiving these services.

PAY CAT	DESCRIPTION	AUTS	AUTW	Grand Total
12	OCWI INFANTS	2		2
13	MAO FOSTER CARE ADOPTION	1	2	3
15	MAO WAIVERS HOME COMMUNITY	2	4	6
31	TITLE IV-E FOSTER CARE	1	1	2
51	TITLE IV E ADOPTION ASSISTANCE	9	3	12
54	SSI NURSING HOME	1		1
57	KATIE BECKETT TEFRA	379	261	639
59	LOW INCOME FAMILIES	6	1	7
60	REGULAR FOSTER CARE	7	2	9
80	SSI	237	282	517
88	OCWI PARTNERS FOR HEALTHY CHN	93	81	174
Grand Total		738	637	1372

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In July 2016, there were 614 children with an active health insurance policy online, this is 44.8% of the total approved for services.

PAY CAT	DESCRIPTION	AUTS	AUTW	Grand Total
15	MAO WAIVERS HOME COMMUNITY		2	2
51	TITLE IV E ADOPTION ASSISTANCE	1		1
57	KATIE BECKETT TEFRA	304	206	510
59	LOW INCOME FAMILIES	1	1	2
80	SSI	34	44	78
88	OCWI PARTNERS FOR HEALTHY CHN	11	10	21
Grand Total		351	263	614

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Evaluation

If a provider receives full payment for ASD treatment from the primary carrier, most of the time the claim is not filed to Medicaid as a secondary claim because no additional payment will be made by Medicaid. Therefore, it is difficult to calculate the actual cost savings because the claim never presents. As of January, 2017 SCDHHS is showing 264 children with primary health insurance that offers ABA therapy for autism as a covered benefit. For the purpose of this project, the cost savings to the State will be estimated as follows:

Estimated Savings for January – December 2017	Maximum Estimated Savings 40 hours each week	Minimum Estimated Savings 20 hours each week
264 Children with Policies that cover ABA Therapy	264 x \$50,000/year =	264 x \$25,000/year =
Savings Per Year	\$13,200,000.00	\$6,600,000.00
Due to the current provider shortage, 50% of the children are receiving services	132 x \$50,000/year	132 x \$25,000/year
Estimated Savings for 2017	\$6,600,000.00	\$3,300,000.00

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Appendix A

A Few Examples of Self-funded Companies that Provide ABA Benefits

Company	HQ State	No. Employed
Abbott Laboratories	IL	91,000
Acosta Sales & Marketing	FL	37,000
Adobe Systems Inc.	CA	12,499
Alphabet (Google)	CA	66,575
Amazon.com Inc.	WA	230,800
American Airlines	TX	114,000
American Express	NY	54,000
Ameritas Holding Co.	NE	5,000
Amica	RI	3,200
Analog Devices	MA	9,600
Apple Inc.	CA	115,000
Arnold & Porter	DC	1,295
Astra Zeneca	DE	13,513
AT&T	TX	243,620
Bank of America	NC	233,000
Behavioral Innovations	TX	90
Blackbaud	SC	2,600
BMW	SC	4,000
Bose Corporation	MA	10,700
Boston University	MA	9,974
Capital One	VA	41,000
CarMax	VA	22,000
Cerner	MO	8,200
Children's Mercy Hospital	MO	5,514
Cisco Systems	CA	70,112
City of Atlanta	GA	7,800
City of Cambridge	MA	2,925
City of New York	NY	325,000
City of Portland	OR	7,659
Cleveland Clinic	OH	36,000
Comcast	PA	153,000
Cornell University	NY	9,645
Costco	WA	117,000
County of Salt Lake	UT	7,000
Credit Suisse	NY	47,400
CVS Health	RI	137,800
Deloitte	NY	39,065
Digital Healthcare Solutions	KS	90
DTE Energy	MI	10,262
E. Michigan University	MI	1,700
Ebay	CA	34,600
Education Testing Services	NJ	2,700
Educational Services of America	TN	1,200
Eli Lilly	IN	38,350
EMC	MA	70,000
Emory University	GA	29,388
Enterprise	MO	83,000
Ernst & Young Americas	NY	65,457
Fiat Chrysler Automobiles	MI	77,817
FINRA	DC	3,400
Ford	MI	199,000

Freddie Mac	VA	4,957
Genentech	CA	13,720
General Electric	CT	305,000
General Motors	MI	216,000
Global Knowledge Training	NC	1,700
Goldman Sachs	NY	33,300
Greenville Health System	SC	11,000
Hanesbrands Inc.	NC	50,000
Harvard	MA	40,000
Harvard Pilgrim Health Care	MA	1,300
HealthCentral	VA	105
Hewlett Packard Enterprise	CA	240,000
Home Depot	GA	371,000
HP Inc.	CA	50,000
Huron Consulting Group	IL	2,870
Indiana University	IN	8,733
Indiana University Health	IN	30,000
Intel	CA	106,700
Iron Mountain	MA	9,800
J.P. Morgan Chase	NY	265,359
JetBlue Airways	NY	17,000
Lahey Clinic	MA	4,000
Lexington Medical Center	SC	6,000
Liberty Mutual Insurance Group	MA	50,000
Mayo Clinic	MN	56,100
McDermott, Will and Emery	IL	2,300
McGuire Woods	VA	856
Medtronic	MN	85,000
Merck	NJ	69,000
Michelin	SC	23,500
Microsoft	WA	118,584
MIT	MA	11,840
Morgan Stanley	NY	55,802
National Grid	MA	15,061
Nationwide Children's Health	OH	10,000
New York Presbyterian	NY	25,638
New York University	NY	7,470
Newell Brands	GA	19,000
Nexsen Pruet	SC	400
Northern Trust Bank	IL	14,100
Novant Health	NC	26,700
Ocean Spray	MA	450
Ohio State University	OH	28,241
Oracle	CA	132,365
Partners Healthcare	MA	16,981
PepsiCo	NY	263,000
Philips Electronics (NA)	MA	25,000
Phillips 66	TX	14,000
Pinnacle Entertainment, Inc.	NV	7,463
Price Waterhouse Coopers	NY	49,375
Princeton University	NJ	5,500
Progressive Corp	OH	25,501
Qualcomm	CA	33,000
R.R. Donnelley & Sons	IL	58,000
Roche Group US	IN	20,220
Safeway	CA	138,000
Salesforce.com	CA	16,227

SAS	NC	13,660
Select Comfort Corporation	MN	3,098
Shell Oil Company	TX	92,000
Sisters of Mercy Health Sys.	MO	26,278
Southern Baptist Convention	TX	40,000
Southern Company	GA	26,112
Southwest Airlines	TX	49,583
Squire Patton Boggs	OH	3,000
St. Charles Health System	OR	3,400
Stanford University	CA	13,246
Starbucks	WA	191,000
State Street Corp.	MA	29,530
SWIFT	VA	2,000
Symantec	CA	20,800
T. Rowe Price	MD	5,870
TD Bank	NJ	26,000
Teamsters Local 25	MA	11,000
Texas Roadhouse	KY	6,000
The Washington Post	DC	740
Time Warner Cable	NY	25,600
TufFile	IL	200
Tufts Health Plan	MA	2,350
Tufts University	MA	3,500
United Auto Workers	MI	390,000
United Technologies	CT	211,500
University of Michigan	MI	29,960
University of Minnesota	MN	25,976
University of Pennsylvania	PA	20,433
Vanguard	PA	12,000
Verisign	VA	1,100
Verizon	NY	177,900
Visa Inc.	CA	11,300
Volvo Group North America	NC	15,000
Wake Forest Baptist Health	NC	12,500
Walmart	AR	1,400,000
Washington University	MO	13,000
Wells Fargo	CA	266,000
White Castle	OH	9,600
Wyandotte County	KS	2,100
Xura (Comverse)	MA	3,000
Yahoo, Inc.	CA	12,500

(Autism Speaks