

April 24, 2009

# New Jersey State Health Benefits Program Actuarial Cost Estimate for

Assembly Committee Substitute for  
Assembly, No. 2238- An Act concerning  
health benefits coverage for certain therapies  
for the treatment of autism and other  
developmental disabilities

## **OLIVER WYMAN**

Prepared By:

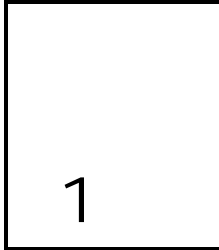
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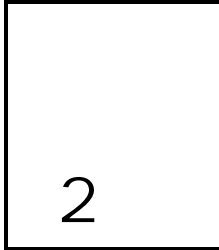


## Background

Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman or we) has been engaged by Autism Speaks to develop a cost model in order to analyze and estimate the impact of mandated statutory benefits for autism spectrum disorders (ASD) on the cost of health coverage. As part of this work, Autism Speaks has asked us to develop an estimate of the costs to the New Jersey State Health Benefits Program (SHBP) for the benefits mandated by New Jersey Assembly Committee Substitute for Assembly, No. 2238 (ACS 2238) dated October 28, 2008. A copy of the bill underlying the cost estimates included in this report is attached as Appendix 1.

Oliver Wyman is a part of the Marsh & McLennan (MMC) family of companies. With over 60 members of the American Academy of Actuaries, Oliver Wyman is one of the largest actuarial practices in North America. Oliver Wyman's health practice, which has twelve credentialed actuaries, advises insurers, regulators, governments, interest groups, and others.

This report, along with its supporting analysis, was developed by Marc Lambright, a Principal and consulting health actuary in Oliver Wyman's Philadelphia office. Marc is a Fellow of the Society of Actuaries and a member of the American Academy of Actuaries and is professionally qualified to analyze the cost impact of ACS 2238 and provide the estimates shown in this report. As part of Oliver Wyman's quality assurance process, the underlying analysis and this report were independently peer reviewed by another credentialed Oliver Wyman actuary.



## Scope and Limitations

The intent of this analysis is to provide a reasonable range of estimates for the costs of the mandated ASD benefits provided for in ACS 2238 to the New Jersey SHBP. This analysis makes no attempt to quantify any other costs or savings associated with this bill. Therefore, the reader is cautioned that this report should only be considered a cost analysis for the New Jersey SHBP, and not be misconstrued as wide-ranging cost-benefit analysis.

We note that cost estimates for autism mandates have varied widely state to state based on differences in the state-specific mandates and the methods and assumptions used in estimating costs, though typically independent estimates show premium increases due to mandated autism benefits of less than 1%. A March 2009 report of The Council for Affordable Health Insurance states: “CAHI’s actuarial working team estimates that an autism mandate increases the cost of health insurance by about 1 percent.”<sup>1</sup> The reason for this variability is that the largest component of the increase in costs under the ACS 2238 mandated ASD benefits is for behavioral therapy, including applied behavior analysis (ABA), which is almost universally excluded from health coverage, and therefore essentially no insured data exists for use in developing credible utilization and unit cost estimates for ABA.

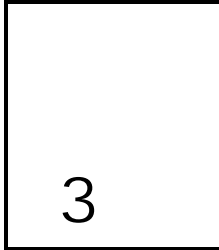
The reader is further cautioned that the ultimate cost of covering ABA benefits is uncertain; however, this analysis attempts to reflect the likely behavior of consumers, providers and insurers of ABA services in developing the assumptions underlying the cost estimates.

Likewise, the additional costs for mandated medical services other than ABA are uncertain. Insurance policies often cover some services for children diagnosed with an ASD, although the mandate could cause costs for certain services to increase because

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<sup>1</sup> The Council for Affordable Health Insurance. “The Growing Trend Towards Autism Coverage.” March 2009.

certain services that may have been denied or terminated following utilization review might be covered due to the mandate.



## Description of Key ACS 2238 Provisions and their Impact on Covered Benefits

### Impact on State Health Benefits Commission and the SHBP

Section 9 states that “... *the State Health Benefits Commission shall provide coverage pursuant to the provisions of this section.*” We have interpreted this to mean that the mandated coverage would apply to all State and Local employer groups covered by the New Jersey SHBP.

### Covered Benefits

The mandate provides for the diagnosis and treatment of autism spectrum disorders, by stating that:

*“a. When the covered person’s primary diagnosis is autism or another developmental disability, the program shall provide coverage for expenses incurred for medically necessary occupational therapy, physical therapy, and speech therapy. Coverage of these therapies shall not be denied on the basis that the treatment is not restorative.*

*b. When the covered person is under 21 years of age and the covered person's primary diagnosis is autism or another developmental disability, the program shall provide coverage for expenses incurred for medically necessary behavioral interventions based on the principles of applied behavioral analysis and related structured behavioral programs, subject to the provisions of this subsection.”*

The coverage of behavioral interventions, including applied behavior analysis (ABA), is especially important. The coverage of behavioral therapies, including ABA, has the most significant impact on cost of any mandated service. For the purpose of this report, reference to ABA encompasses all behavioral therapies. We note ABA is the most widely accepted behavioral therapy and that we would expect other approved behavioral programs to have similar costs.

ABA programs are marked by intensive therapy that may include 30-40 hours of therapy a week under the most intensive programs, although many programs would not utilize that level of resources. Key assumptions underlying our ABA cost estimates are outlined in Section 5.

Annual Maximum Benefit for Applied Behavior Analysis

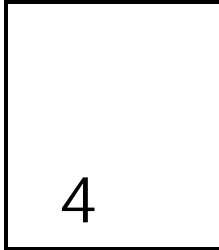
ACS 2238 specifically states in 9.b.(3)(a) that: *“The maximum benefit amount for a covered person in any calendar year through 2011 shall be \$36,000.”*

Maximum Age for Benefits

ACS 2238 specifically limits coverage for ABA and behavioral interventions to covered persons under 21 years of age. There does not appear to be an age limit for other services.

Medical Necessity and Treatment Review

ACS 2238 specifically states: *“The coverage required under this section may be subject to utilization review, including periodic review, by the program of the continued medical necessity of the specified therapies and interventions.”* This is important as insurers will develop protocols to review treatments and manage care which will limit unnecessary treatments if reviews are done appropriately.



## Modeling Methodology

The following outlines the general modeling methodology used to develop our cost estimates. Estimates were developed on a per covered person per year basis as shown in Section 6. Details of key assumptions are discussed in Section 5 and illustrated graphically in the exhibits shown in Appendix 2.

## Modeling Perspective

Our model was developed to produce costs under a range of assumptions, but generally assumes that a sufficient supply of providers would be available to meet the demand for autism services, especially with regard to ABA services. It also assumes that there would be sufficient awareness of autism and motivation (primarily by parents) to seek treatment so that the diagnosis and treatment of ASDs would be more in-line with CDC prevalence estimates. We would expect it could take some time for both the supply of providers to meet the demand for mandated ASD services and for parents of autistic children to aggressively seek diagnosis and treatment of their children's disorders. Because of this, there may be some conservatism in the estimates shown in Section 6, at least in the near term.

## General Modeling Process

The modeling process employed to develop our cost estimates was as follows:

1. Assumed treated prevalence for the United States is 1 in 150 based on the CDC's estimate of ASD prevalence in the United States. Prevalence rates by diagnostic subtype (autistic disorder, PDD-NOS, Asperger's Syndrome) were estimated separately, since diagnosis patterns and service utilization could reasonably be expected to vary by diagnostic subtype.

2. The percentage of children diagnosed by age for each diagnostic subtype was estimated so that the average ages of diagnosis implicit in the modeling are consistent with publicly available age at diagnosis statistics.<sup>2</sup>
3. The percentage of diagnosed children who could be expected to have an ABA program was estimated for each age based on assumptions regarding how many children would start a program and typical program continuance.
4. A distribution of the number of annual hours for ABA by age was developed based on ABA provider input and an assumption that utilization review by insurers would impact utilization to some degree.
5. Based on the assumed treatment prevalence, likelihood of having an ABA program, assumed distribution of ABA program hours, and estimated ABA program cost per hour of therapy, ABA cost estimates by age were developed.
6. Non-ABA costs were estimated based upon studies of medical costs for children diagnosed with ASD and judgment regarding the increase in costs that could be expected due to the mandated benefits.
7. Based on Census demographic data and the cost estimates for mandated ASD services by age as outlined in 1-6 above, an annual cost per covered individual was developed.
8. The estimated enrollment in the SHBP is estimated based on the fiscal year 2007 annual report as documented in Section 6.

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<sup>2</sup> IAN database. <http://dashboard.ianexchange.org/StateStatsAdvanced.aspx?A1=VA&ADU=T>. Accessed January 2009.



## Summary of Key Assumptions

Key assumptions underlying the cost estimates for the proposed mandated benefits are summarized in this section. In order to better illustrate the sensitivity of costs to various assumptions, we developed assumptions for “Low,” “Middle,” and “High” cost scenarios. Appendix 2 further illustrates these assumptions for the “Middle” scenario.

## Treated Prevalence and Age at Diagnosis

Overall treated prevalence is based on the 2007 CDC<sup>3</sup> study estimating United States ASD prevalence of 1 in 150. Prevalence by diagnostic subtype was estimated based on an academic study published in the American Journal of Psychiatry.<sup>4</sup>

As noted in the previous section, the percentage of children diagnosed by age for each diagnostic subtype was estimated so that the average age of diagnosis implicit in the modeling is consistent with publicly available age at diagnosis statistics.

The treated prevalence and age at diagnosis assumptions for New Jersey are shown below:

<u>Diagnostic Subtype</u>	<u>New Jersey Prevalence</u> Ultimate Prevalence	<u>Average Age of Diagnosis</u>
Autistic Disorder	1 in 450	3
PDD-NOS	1 in 300	3
Asperger's	1 in 900	6
<b>All ASD</b>	<b>1 in 150</b>	

<sup>3</sup> Centers for Disease Control. Morbidity and Mortality Weekly Report. February 9, 2007.

<sup>4</sup> Fombonne, E. and S. Chakrabarti. American Journal of Psychiatry. June 2005.

## ABA Program Utilization and Cost

### ABA Program Utilization by Age

ABA programs require a significant commitment from affected children, as well as their families. It is likely that a significant number of ASD children will not have an ABA program regardless of the availability of a provider, and many others diagnosed with ASD, especially those in more rural areas, may have difficulty accessing a provider. For this reason, we have assumed that 40% to 66.7% (40% for “Low” scenario, 50% for “Middle” and 66.7% for “High”) of diagnosed children under age 6 will begin an ABA program. Based on discussions with ABA providers and researchers, actual utilization of ABA programs has been lower in many cases due to the lack of providers, the lack of coverage, and to some extent the limited understanding of ABA programs and their efficacy.

In Minnesota, a state that is widely regarded as having some of the most extensive ABA coverage and services in the nation, provider data indicates ABA utilization of approximately 20% of diagnosed three to six year olds<sup>5</sup>, which is considerably lower than assumed in each of the scenarios in our modeling. While our range of assumptions for ABA utilization may appear conservative relative to this experience, utilization for those enrolled in the SHBP will likely be higher than under the public/private programs in Minnesota, and utilization could increase over time due to increased awareness of ASD, and potentially an increased supply of ABA providers.

In addition to the likelihood of starting a program, program continuance assumptions have a very significant impact on overall ABA utilization and cost estimates. ABA programs are generally geared towards addressing deficits in younger children and are not intended to be continued indefinitely. For this reason, we have assumed that no programs would terminate prior to school age, that a large percentage of ABA programs would terminate at ages six and seven when an autistic child could be expected to enter elementary school, and annually thereafter a large percentage of remaining programs would terminate until only a very small percentage of children have ABA programs in their teenage years. Programs would be expected to terminate if a child has experienced sufficient progress whereby a program is no longer necessary or if the insurer or family sees no progress, as well as for other reasons.

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<sup>5</sup> Discussion with Dr. Eric Larsson Executive Director, Clinical Services, The Lovaas Institute for Early Intervention Midwest Headquarters regarding ABA utilization research in Minnesota. February 2009.

The assumed percentage of children diagnosed with ASD that have an ABA program by age for our “Middle” scenario is shown in the table below:

<b>% of Diagnosed Children w/ ABA</b>	
Under 6	50.0%
6	37.5%
7	25.0%
8	16.7%
9	11.1%
10	7.4%
11	4.9%
12	3.3%
Ages 13 to 20	2.5%

#### ABA Program Annual Number of Hours

In developing the assumed annual ABA program hours, we discussed typical ABA programming with ABA providers, and reviewed some benefit materials from one of the few large self-insured employers who offer ABA benefits.<sup>6</sup> For three age bands we developed a distribution of expected hours that resulted in the annual averages shown in the table below:

<b>Average ABA Program Hours</b>	
Ages Under 8	1,500
Ages 8 to 12	671
Ages 13 to 20	401

The general assumption is that pre-school aged children will have programs for 20 to 40 hours a week, averaging about 30 hours a week. This time will be reduced by over half by age eight when children would be expected to be in school and the school system would be required to provide services during the school day, and would then again be reduced significantly at age 13 as the child ages and ABA programs would be expected to be less time consuming and address a smaller number of behavioral deficits.

#### Cost per Hour of ABA Service

In developing the costs per hour, we reviewed ABA program staffing information and ABA provider wage and overhead cost assumptions. We developed an average cost for the entire United States and then adjusted this for New Jersey, based on Bureau of Labor Statistics<sup>7</sup> health care wage data. The resulting estimated average cost per hour of ABA therapy in New Jersey is \$53.90 for a program based on the assumption that staffing will be in line with what best practices might recommend. This is the cost underlying our “High” assumption, though we note that costs would vary based on the mix of professionals and technicians providing the services, and likely would be lower if less experienced ABA practitioners need to be employed to meet the increasing demands for services.

<sup>6</sup> Autism Therapy Reference- Microsoft Corporation (administered by Premera Blue Cross).

<sup>7</sup> BLS wage data. <http://www.bls.gov/guide/geography/wages.htm> accessed January 2009.

### Range of Annual ABA Program Costs for Scenario Estimates

Given the actual cost of an ABA program could vary significantly for many reasons, we have assumed annual average program costs by scenario as follows. Note these average annual costs include the impact of the \$36,000 annual cap.

**“Low” cost scenario** - assumes average ABA program cost is \$25,000 per year.

**“Middle” cost scenario** - assumes average ABA program cost is \$30,000 per year.

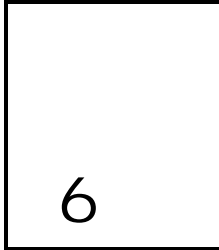
**“High” cost scenario** - based on the assumptions outlined in this section for the continuance of ABA programming, the number of annual hours for ABA programming, and an hourly rate of \$53.90, the calculated average annual cost for an ABA program for all ages is \$33,788.

### Other (than ABA) Medical Costs

Based on several studies<sup>8</sup>, we estimated that children with ASDs had costs covered by insurers of approximately three times the average for non-inpatient medical services under current benefit programs. It is also clear that the mandate would mean that some services that an insurer could currently deny or exclude would now be covered. In our range of estimates, we assumed that the mandate would result in additional insured medical costs equal to 50% to 100% of the current level of estimated covered non-inpatient costs for services to children under 23 diagnosed with an ASD. We also noted that average medical costs for medical services associated with ASD typically decrease as individuals age, so we reduced costs for covered dependents ages 23 and over which would also take into account that many children with an ASD can become independent adults and would cease to be covered by their parents’ insurance policies.

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<sup>8</sup> Mandell, Cao, Ittenbach, & Pinto-Martin, 2006. Croen, Najjar, Ray, Lotspeich, & Bernal, 2006. Liptak, Stuart, & Auinger, 2006.



## Benefit Cost Estimates

### Long-Term Cost Estimates

The table below summarizes our annual claim cost estimates for the mandated benefits on a per covered person basis, along with certain underlying assumptions impacting these estimates. We would also expect a small increase in administrative costs associated with the mandated benefits of perhaps 5%, or less of the claims cost estimates.

Scenario	% Diagnosed Under Age 6 Starting ABA	Avg. Annual ABA Program Cost	Avg. Annual Under 23 non-ABA Cost	Avg. Annual 23 & Over non-ABA Cost	Annual Claim Cost Increase per Person
Low	40.0%	\$25,000	\$2,050	\$1,025	\$11.10
Middle	50.0%	\$30,000	\$3,075	\$1,538	\$16.60
High	66.7%	\$33,788	\$4,100	\$2,050	\$23.40

(All Estimated Cost Amounts are in 2009 Dollars)

Our estimate is that in the long-term, ACS 2238 would increase the benefit costs of the SHBP by about \$11.10 to \$23.40 per covered person per year, measured in 2009 dollars.

## Cost Estimates by Group

Our total cost estimates, again in 2009 dollars, to the various Active employee groups included in the SHBP are shown in the table below.

<b>SHBP Cost Estimate for ACS 2238</b>				
<b>Annual Benefits Costs by Group</b>				
<u>Group</u>	<u>Enrollment*</u>	<u>Low</u>	<u>Mid</u>	<u>High</u>
State Employer Group	277,900	\$3,080,000	\$4,610,000	\$6,500,000
Local Employer Group- Education	172,180	1,910,000	2,860,000	4,030,000
Local Employer Group- Government	117,240	1,300,000	1,950,000	2,740,000
All Employer Groups	567,320	\$6,290,000	\$9,420,000	\$13,270,000
Annual Cost per Enrollee (2009 Dollars)		\$11.10	\$16.60	\$23.40
* Employees + Dependents as of June 30, 2007				

Note that we do not have detailed demographic data for the various groups, so we are assuming that their costs would be similar to those developed based on the state demographic data used in developing the costs outlined in this report. We also are assuming that the costs to the retiree plans would be negligible due to the limited number children that would be covered by those plans. We also assume that the enrollment figures as of June 30, 2007 shown in the SHBP fiscal year 2007 annual report<sup>9</sup> are reasonably consistent with the current enrollment.

<sup>9</sup> 2007 State Health Benefits Program Annual Report.  
[http://www.state.nj.us/treasury/pensions/2007\\_fund\\_reports/shbp-2007.pdf](http://www.state.nj.us/treasury/pensions/2007_fund_reports/shbp-2007.pdf). Accessed April 2009.

Appendix 1

Assembly Committee Substitute for Assembly, No. 2238

ASSEMBLY COMMITTEE SUBSTITUTE FOR  
ASSEMBLY, No. 2238

**STATE OF NEW JERSEY**

**Sponsored by Assemblymen PRIETO, ROBERTS, Assemblywoman VOSS,  
Assemblymen Ramos, Biondi, Assemblywoman Pou, Vainieri Huttie, Assemblymen  
Coutinho, Scalera, Diegnan, Assemblywomen Wagner, Lampitt and Jasey**

AN ACT concerning health benefits coverage for certain therapies  
for the treatment of autism and other developmental disabilities  
and supplementing various parts of the statutory law.

**BE IT ENACTED** by the Senate and General Assembly of the State  
of New Jersey:

1. Notwithstanding any other provision of law to the contrary,  
every hospital service corporation contract that provides hospital  
and medical expense benefits and is delivered, issued, executed, or  
renewed in this State pursuant to P.L.1938, c.366 (C.17:48-1 et  
seq.), or approved for issuance or renewal in this State by the  
Commissioner of Banking and Insurance, on or after the effective  
date of this act, shall provide coverage pursuant to the provisions of  
this section.

a. When the covered person's primary diagnosis is autism or  
another developmental disability, the hospital service corporation  
shall provide coverage for expenses incurred for **medically  
necessary** occupational therapy, physical therapy, and speech  
therapy. Coverage of these therapies shall not be denied on the  
basis that the treatment is not restorative.

b. When the covered person is under 21 years of age and the  
covered person's primary diagnosis is autism or another  
developmental disability, the hospital service corporation shall  
provide coverage for expenses incurred for **medically necessary**  
behavioral interventions based on the principles of applied  
behavioral analysis and related structured behavioral programs,  
subject to the provisions of this subsection.

(1) Except as provided in paragraph (3) of this subsection, the  
benefits provided pursuant to this subsection shall be provided to  
the same extent as for any other medical condition under the  
contract, **but shall not be subject to limits on the number of visits  
that a covered person may make to a provider of behavioral**

**interventions.**

(2) The benefits provided pursuant to this subsection shall not be denied on the basis that the treatment is not restorative.

(3) (a) The maximum benefit amount for a covered person in any calendar year through 2011 shall be \$36,000;

(b) Commencing on January 1, 2012, the maximum benefit amount shall be subject to an adjustment, to be promulgated by the Commissioner of Banking and Insurance and published in the New Jersey Register no later than February 1 of each calendar year, which shall be equal to the change in the consumer price index for all urban consumers for the nation, as prepared by the United States Department of Labor, for the calendar year preceding the calendar year in which the adjustment to the maximum benefit amount is promulgated; and

(c) The adjusted maximum benefit amount shall apply to a contract that is delivered, issued, executed, or renewed, or approved for issuance or renewal, in the 12-month period following the date on which the adjustment is promulgated.

(4) The provisions of this subsection shall not be construed to: require that benefits be provided to reimburse the cost of services provided under an individualized family service plan or an individualized education program; or affect any requirement to provide those services.

**(5) The provisions of this subsection shall not be construed as limiting benefits otherwise available to a covered person.**

**c. The coverage required under this section may be subject to utilization review, including periodic review, by the hospital service corporation of the continued medical necessity of the specified therapies and interventions.**

d. The provisions of this section shall apply to all contracts in which the hospital service corporation has reserved the right to change the premium.

2. a. Notwithstanding any other provision of law to the contrary, every medical service corporation contract that provides hospital and medical expense benefits and is delivered, issued, executed, or renewed in this State pursuant to P.L.1940, c.74 (C.17:48A-1 et seq.), or approved for issuance or renewal in this State by the Commissioner of Banking and Insurance, on or after the effective date of this act, shall provide coverage pursuant to the provisions of this section.

a. When the covered person's primary diagnosis is autism or another developmental disability, the medical service corporation shall provide coverage for expenses incurred for medically necessary occupational therapy, physical therapy, and speech therapy. Coverage of these therapies shall not be denied on the basis that the treatment is not restorative.

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b. When the covered person is under 21 years of age and the covered person's primary diagnosis is autism or another developmental disability, the medical service corporation shall provide coverage for expenses incurred for medically necessary behavioral interventions based on the principles of applied behavioral analysis and related structured behavioral programs, subject to the provisions of this subsection.

(1) Except as provided in paragraph (3) of this subsection, the benefits provided pursuant to this subsection shall be provided to the same extent as for any other medical condition under the contract, but shall not be subject to limits on the number of visits that a covered person may make to a provider of behavioral interventions.

(2) The benefits provided pursuant to this subsection shall not be denied on the basis that the treatment is not restorative.

(3) (a) The maximum benefit amount for a covered person in any calendar year through 2011 shall be \$36,000;

(b) Commencing on January 1, 2012, the maximum benefit amount shall be subject to an adjustment, to be promulgated by the Commissioner of Banking and Insurance and published in the New Jersey Register no later than February 1 of each calendar year, which shall be equal to the change in the consumer price index for all urban consumers for the nation, as prepared by the United States Department of Labor, for the calendar year preceding the calendar year in which the adjustment to the maximum benefit amount is promulgated; and

(c) The adjusted maximum benefit amount shall apply to a contract that is delivered, issued, executed, or renewed, or approved for issuance or renewal, in the 12-month period following the date on which the adjustment is promulgated.

(4) The provisions of this subsection shall not be construed to: require that benefits be provided to reimburse the cost of services provided under an individualized family service plan or an individualized education program; or affect any requirement to provide those services.

(5) The provisions of this subsection shall not be construed as limiting benefits otherwise available to a covered person.

c. The coverage required under this section may be subject to utilization review, including periodic review, by the medical service corporation of the continued medical necessity of the specified therapies and interventions.

d. The provisions of this section shall apply to all contracts in which the medical service corporation has reserved the right to change the premium.

3. a. Notwithstanding any other provision of law to the contrary, every health service corporation contract that provides

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hospital and medical expense benefits and is delivered, issued, executed, or renewed in this State pursuant to P.L.1985, c.236 (C.17:48E-1 et seq.), or approved for issuance or renewal in this State by the Commissioner of Banking and Insurance, on or after the effective date of this act, shall provide coverage pursuant to the provisions of this section.

a. When the covered person's primary diagnosis is autism or another developmental disability, the health service corporation shall provide coverage for expenses incurred for medically necessary occupational therapy, physical therapy, and speech therapy. Coverage of these therapies shall not be denied on the basis that the treatment is not restorative.

b. When the covered person is under 21 years of age and the covered person's primary diagnosis is autism or another developmental disability, the health service corporation shall provide coverage for expenses incurred for medically necessary behavioral interventions based on the principles of applied behavioral analysis and related structured behavioral programs, subject to the provisions of this subsection.

(1) Except as provided in paragraph (3) of this subsection, the benefits provided pursuant to this subsection shall be provided to the same extent as for any other medical condition under the contract, but shall not be subject to limits on the number of visits that a covered person may make to a provider of behavioral interventions.

(2) The benefits provided pursuant to this subsection shall not be denied on the basis that the treatment is not restorative.

(3) (a) The maximum benefit amount for a covered person in any calendar year through 2011 shall be \$36,000;

(b) Commencing on January 1, 2012, the maximum benefit amount shall be subject to an adjustment, to be promulgated by the Commissioner of Banking and Insurance and published in the New Jersey Register no later than February 1 of each calendar year, which shall be equal to the change in the consumer price index for all urban consumers for the nation, as prepared by the United States Department of Labor, for the calendar year preceding the calendar year in which the adjustment to the maximum benefit amount is promulgated; and

(c) The adjusted maximum benefit amount shall apply to a contract that is delivered, issued, executed, or renewed, or approved for issuance or renewal, in the 12-month period following the date on which the adjustment is promulgated.

(4) The provisions of this subsection shall not be construed to: require that benefits be provided to reimburse the cost of services provided under an individualized family service plan or an individualized education program; or affect any requirement to provide those services.

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(5) The provisions of this subsection shall not be construed as limiting benefits otherwise available to a covered person.

c. The coverage required under this section may be subject to utilization review, including periodic review, by the health service corporation of the continued medical necessity of the specified therapies and interventions.

d. The provisions of this section shall apply to all contracts in which the health service corporation has reserved the right to change the premium.

4. a. Notwithstanding any other provision of law to the contrary, every individual health insurance policy that provides hospital and medical expense benefits and is delivered, issued, executed, or renewed in this State pursuant to chapter 26 of Title 17B of the New Jersey Statutes, or approved for issuance or renewal in this State by the Commissioner of Banking and Insurance, on or after the effective date of this act, shall provide coverage pursuant to the provisions of this section.

a. When the covered person's primary diagnosis is autism or another developmental disability, the insurer shall provide coverage for expenses incurred for medically necessary occupational therapy, physical therapy, and speech therapy. Coverage of these therapies shall not be denied on the basis that the treatment is not restorative.

b. When the covered person is under 21 years of age and the covered person's primary diagnosis is autism or another developmental disability, the insurer shall provide coverage for expenses incurred for medically necessary behavioral interventions based on the principles of applied behavioral analysis and related structured behavioral programs, subject to the provisions of this subsection.

(1) Except as provided in paragraph (3) of this subsection, the benefits provided pursuant to this subsection shall be provided to the same extent as for any other medical condition under the contract, but shall not be subject to limits on the number of visits that a covered person may make to a provider of behavioral interventions.

(2) The benefits provided pursuant to this subsection shall not be denied on the basis that the treatment is not restorative.

(3) (a) The maximum benefit amount for a covered person in any calendar year through 2011 shall be \$36,000;

(b) Commencing on January 1, 2012, the maximum benefit amount shall be subject to an adjustment, to be promulgated by the Commissioner of Banking and Insurance and published in the New Jersey Register no later than February 1 of each calendar year, which shall be equal to the change in the consumer price index for all urban consumers for the nation, as prepared by the United States Department of Labor, for the calendar year preceding the calendar

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year in which the adjustment to the maximum benefit amount is promulgated; and

(c) The adjusted maximum benefit amount shall apply to a contract that is delivered, issued, executed, or renewed, or approved for issuance or renewal, in the 12-month period following the date on which the adjustment is promulgated.

(4) The provisions of this subsection shall not be construed to: require that benefits be provided to reimburse the cost of services provided under an individualized family service plan or an individualized education program; or affect any requirement to provide those services.

(5) The provisions of this subsection shall not be construed as limiting benefits otherwise available to a covered person.

c. The coverage required under this section may be subject to utilization review, including periodic review, by the insurer of the continued medical necessity of the specified therapies and interventions.

d. The provisions of this section shall apply to all policies in which the insurer has reserved the right to change the premium.

5. a. Notwithstanding any other provision of law to the contrary, every group health insurance policy that provides hospital and medical expense benefits and is delivered, issued, executed, or renewed in this State pursuant to chapter 27 of Title 17B of the New Jersey Statutes, or approved for issuance or renewal in this State by the Commissioner of Banking and Insurance, on or after the effective date of this act, shall provide coverage pursuant to the provisions of this section.

a. When the covered person's primary diagnosis is autism or another developmental disability, the insurer shall provide coverage for expenses incurred for medically necessary occupational therapy, physical therapy, and speech therapy. Coverage of these therapies shall not be denied on the basis that the treatment is not restorative.

b. When the covered person is under 21 years of age and the covered person's primary diagnosis is autism or another developmental disability, the insurer shall provide coverage for expenses incurred for medically necessary behavioral interventions based on the principles of applied behavioral analysis and related structured behavioral programs, subject to the provisions of this subsection.

(1) Except as provided in paragraph (3) of this subsection, the benefits provided pursuant to this subsection shall be provided to the same extent as for any other medical condition under the contract, but shall not be subject to limits on the number of visits that a covered person may make to a provider of behavioral interventions.

(2) The benefits provided pursuant to this subsection shall not

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be denied on the basis that the treatment is not restorative.

(3) (a) The maximum benefit amount for a covered person in any calendar year through 2011 shall be \$36,000;

(b) Commencing on January 1, 2012, the maximum benefit amount shall be subject to an adjustment, to be promulgated by the Commissioner of Banking and Insurance and published in the New Jersey Register no later than February 1 of each calendar year, which shall be equal to the change in the consumer price index for all urban consumers for the nation, as prepared by the United States Department of Labor, for the calendar year preceding the calendar year in which the adjustment to the maximum benefit amount is promulgated; and

(c) The adjusted maximum benefit amount shall apply to a contract that is delivered, issued, executed, or renewed, or approved for issuance or renewal, in the 12-month period following the date on which the adjustment is promulgated.

(4) The provisions of this subsection shall not be construed to: require that benefits be provided to reimburse the cost of services provided under an individualized family service plan or an individualized education program; or affect any requirement to provide those services.

(5) The provisions of this subsection shall not be construed as limiting benefits otherwise available to a covered person.

c. The coverage required under this section may be subject to utilization review, including periodic review, by the insurer of the continued medical necessity of the specified therapies and interventions.

d. The provisions of this section shall apply to all policies in which the insurer has reserved the right to change the premium.

6. a. Notwithstanding any other provision of law to the contrary, an individual health benefits plan that provides hospital and medical expense benefits and is delivered, issued, executed, renewed, or approved for issuance or renewal in this State pursuant to P.L.1992, c.161 (C.17B:27A-2 et seq.), or approved for issuance or renewal in this State by the Commissioner of Banking and Insurance, on or after the effective date of this act, shall provide coverage pursuant to the provisions of this section.

a. When the covered person's primary diagnosis is autism or another developmental disability, the carrier shall provide coverage for expenses incurred for medically necessary occupational therapy, physical therapy, and speech therapy. Coverage of these therapies shall not be denied on the basis that the treatment is not restorative.

b. When the covered person is under 21 years of age and the covered person's primary diagnosis is autism or another developmental disability, the carrier shall provide coverage for expenses incurred for medically necessary behavioral interventions

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based on the principles of applied behavioral analysis and related structured behavioral programs, subject to the provisions of this subsection.

(1) Except as provided in paragraph (3) of this subsection, the benefits provided pursuant to this subsection shall be provided to the same extent as for any other medical condition under the contract, but shall not be subject to limits on the number of visits that a covered person may make to a provider of behavioral interventions.

(2) The benefits provided pursuant to this subsection shall not be denied on the basis that the treatment is not restorative.

(3) (a) The maximum benefit amount for a covered person in any calendar year through 2011 shall be \$36,000;

(b) Commencing on January 1, 2012, the maximum benefit amount shall be subject to an adjustment, to be promulgated by the Commissioner of Banking and Insurance and published in the New Jersey Register no later than February 1 of each calendar year, which shall be equal to the change in the consumer price index for all urban consumers for the nation, as prepared by the United States Department of Labor, for the calendar year preceding the calendar year in which the adjustment to the maximum benefit amount is promulgated; and

(c) The adjusted maximum benefit amount shall apply to a contract that is delivered, issued, executed, or renewed, or approved for issuance or renewal, in the 12-month period following the date on which the adjustment is promulgated.

(4) The provisions of this subsection shall not be construed to: require that benefits be provided to reimburse the cost of services provided under an individualized family service plan or an individualized education program; or affect any requirement to provide those services.

(5) The provisions of this subsection shall not be construed as limiting benefits otherwise available to a covered person.

c. The coverage required under this section may be subject to utilization review, including periodic review, by the carrier of the continued medical necessity of the specified therapies and interventions.

d. The provisions of this section shall apply to those health benefits plans in which the carrier has reserved the right to change the premium.

7. a. Notwithstanding any other provision of law to the contrary, a small employer health benefits plan that provides hospital and medical expense benefits and is delivered, issued, executed, renewed, or approved for issuance or renewal in this State pursuant to P.L.1992, c.162 (C.17B:27A-17 et seq.), or approved for issuance or renewal in this State by the Commissioner of

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Banking and Insurance, on or after the effective date of this act, shall provide coverage pursuant to the provisions of this section.

a. When the covered person's primary diagnosis is autism or another developmental disability, the carrier shall provide coverage for expenses incurred for medically necessary occupational therapy, physical therapy, and speech therapy. Coverage of these therapies shall not be denied on the basis that the treatment is not restorative.

b. When the covered person is under 21 years of age and the covered person's primary diagnosis is autism or another developmental disability, the carrier shall provide coverage for expenses incurred for medically necessary behavioral interventions based on the principles of applied behavioral analysis and related structured behavioral programs, subject to the provisions of this subsection.

(1) Except as provided in paragraph (3) of this subsection, the benefits provided pursuant to this subsection shall be provided to the same extent as for any other medical condition under the contract, but shall not be subject to limits on the number of visits that a covered person may make to a provider of behavioral interventions.

(2) The benefits provided pursuant to this subsection shall not be denied on the basis that the treatment is not restorative.

(3) (a) The maximum benefit amount for a covered person in any calendar year through 2011 shall be \$36,000;

(b) Commencing on January 1, 2012, the maximum benefit amount shall be subject to an adjustment, to be promulgated by the Commissioner of Banking and Insurance and published in the New Jersey Register no later than February 1 of each calendar year, which shall be equal to the change in the consumer price index for all urban consumers for the nation, as prepared by the United States Department of Labor, for the calendar year preceding the calendar year in which the adjustment to the maximum benefit amount is promulgated; and

(c) The adjusted maximum benefit amount shall apply to a contract that is delivered, issued, executed, or renewed, or approved for issuance or renewal, in the 12-month period following the date on which the adjustment is promulgated.

(4) The provisions of this subsection shall not be construed to: require that benefits be provided to reimburse the cost of services provided under an individualized family service plan or an individualized education program; or affect any requirement to provide those services.

(5) The provisions of this subsection shall not be construed as limiting benefits otherwise available to a covered person.

c. The coverage required under this section may be subject to utilization review, including periodic review, by the carrier of the continued medical necessity of the specified therapies and

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interventions.

d. The provisions of this section shall apply to those health benefits plans in which the carrier has reserved the right to change the premium.

8. a. Notwithstanding any other provision of law to the contrary, a health maintenance organization enrollee agreement that provides health care services and is delivered, issued, executed, or renewed in this State pursuant to P.L.1973, c.337 (C.26:2J-1 et seq.), or approved for issuance or renewal in this State by the Commissioner of Banking and Insurance, on or after the effective date of this act, shall provide coverage pursuant to the provisions of this section.

a. When the covered person's primary diagnosis is autism or another developmental disability, the health maintenance organization shall provide coverage for medically necessary occupational therapy, physical therapy, and speech therapy services. Coverage of these therapies shall not be denied on the basis that the treatment is not restorative.

b. When the covered person is under 21 years of age and the covered person's primary diagnosis is autism or another developmental disability, the health maintenance organization shall provide coverage for medically necessary behavioral interventions based on the principles of applied behavioral analysis and related structured behavioral programs, subject to the provisions of this subsection.

(1) Except as provided in paragraph (3) of this subsection, the coverage provided pursuant to this subsection shall be provided to the same extent as for any other medical condition under the contract, but shall not be subject to limits on the number of visits that a covered person may make to a provider of behavioral interventions.

(2) The coverage provided pursuant to this subsection shall not be denied on the basis that the treatment is not restorative.

(3) (a) The maximum coverage amount for a covered person in any calendar year through 2011 shall be \$36,000;

(b) Commencing on January 1, 2012, the maximum coverage amount shall be subject to an adjustment, to be promulgated by the Commissioner of Banking and Insurance and published in the New Jersey Register no later than February 1 of each calendar year, which shall be equal to the change in the consumer price index for all urban consumers for the nation, as prepared by the United States Department of Labor, for the calendar year preceding the calendar year in which the adjustment to the maximum benefit amount is promulgated; and

(c) The adjusted maximum coverage amount shall apply to a contract that is delivered, issued, executed, or renewed, or approved

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for issuance or renewal, in the 12-month period following the date on which the adjustment is promulgated.

(4) The provisions of this subsection shall not be construed to: require that coverage be provided for the cost of services provided under an individualized family service plan or an individualized education program; or affect any requirement to provide those services.

(5) The provisions of this subsection shall not be construed as limiting benefits otherwise available to a covered person.

c. The coverage required under this section may be subject to utilization review, including periodic review, by the health maintenance organization of the continued medical necessity of the specified therapies and interventions.

d. The provisions of this section shall apply to those enrollee agreements in which the health maintenance organization has reserved the right to change the premium.

9. a. Notwithstanding any other provision of law to the contrary, the State Health Benefits Commission shall provide coverage pursuant to the provisions of this section.

a. When the covered person's primary diagnosis is autism or another developmental disability, the program shall provide coverage for expenses incurred for medically necessary occupational therapy, physical therapy, and speech therapy. Coverage of these therapies shall not be denied on the basis that the treatment is not restorative.

b. When the covered person is under 21 years of age and the covered person's primary diagnosis is autism or another developmental disability, the program shall provide coverage for expenses incurred for medically necessary behavioral interventions based on the principles of applied behavioral analysis and related structured behavioral programs, subject to the provisions of this subsection.

(1) Except as provided in paragraph (3) of this subsection, the benefits provided pursuant to this subsection shall be provided to the same extent as for any other medical condition under the program, but shall not be subject to limits on the number of visits that a covered person may make to a provider of behavioral interventions.

(2) The benefits provided pursuant to this subsection shall not be denied on the basis that the treatment is not restorative.

(3) (a) The maximum benefit amount for a covered person in any calendar year through 2011 shall be \$36,000;

(b) Commencing on January 1, 2012, the maximum benefit amount shall be subject to an adjustment, to be promulgated by the Commissioner of Banking and Insurance and published in the New Jersey Register no later than February 1 of each calendar year,

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which shall be equal to the change in the consumer price index for all urban consumers for the nation, as prepared by the United States Department of Labor, for the calendar year preceding the calendar year in which the adjustment to the maximum benefit amount is promulgated; and

(c) The adjusted maximum benefit amount shall apply to a contract that is delivered, issued, executed, or renewed, or approved for issuance or renewal, in the 12-month period following the date on which the adjustment is promulgated.

(4) The provisions of this subsection shall not be construed to: require that benefits be provided to reimburse the cost of services provided under an individualized family service plan or an individualized education program; or affect any requirement to provide those services.

(5) The provisions of this subsection shall not be construed as limiting benefits otherwise available to a covered person.

c. The coverage required under this section may be subject to utilization review, including periodic review, by the program of the continued medical necessity of the specified therapies and interventions.

10. This act shall take effect on the 180th day after enactment.

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Requires health benefits coverage for certain therapies for the treatment of autism and other developmental disabilities.

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Appendix 2

Cost Assumptions – Illustrative Exhibits

## APPENDIX 2 - SUMMARY OF ACS 2238 "MIDDLE" SCENARIO ASSUMPTIONS

State

NewJersey

Key Assumptions:

<u>United States Prevalence</u>			<u>% of Diagnosed Children w/ ABA</u>	
<u>Diagnostic Subtype</u>	<u>Ultimate Prevalence</u>	<u>Average Age of Diagnosis</u>		
Autistic Disorder	1 in 450	3	Under 6	50.0%
PDD-NOS	1 in 300	3	6	37.5%
Asperger's	1 in 900	6	7	25.0%
<b>All ASD</b>	<b>1 in 150</b>		8	16.7%
			9	11.1%
			10	7.4%
			11	4.9%
			12	3.3%
			Ages 13 to 20	2.5%
NewJersey Prevalence Adjustment: 1.00				
<u>NewJersey Prevalence</u>			<u>Average ABA Program Hours</u>	
<u>Diagnostic Subtype</u>	<u>Ultimate Prevalence</u>	<u>Average Age of Diagnosis</u>		
Autistic Disorder	1 in 450	3	Ages Under 8	1,500
PDD-NOS	1 in 300	3	Ages 8 to 12	671
Asperger's	1 in 900	6	Ages 13 to 20	401
<b>All ASD</b>	<b>1 in 150</b>			

Additional Annual Medical Costs for Non ABA Services

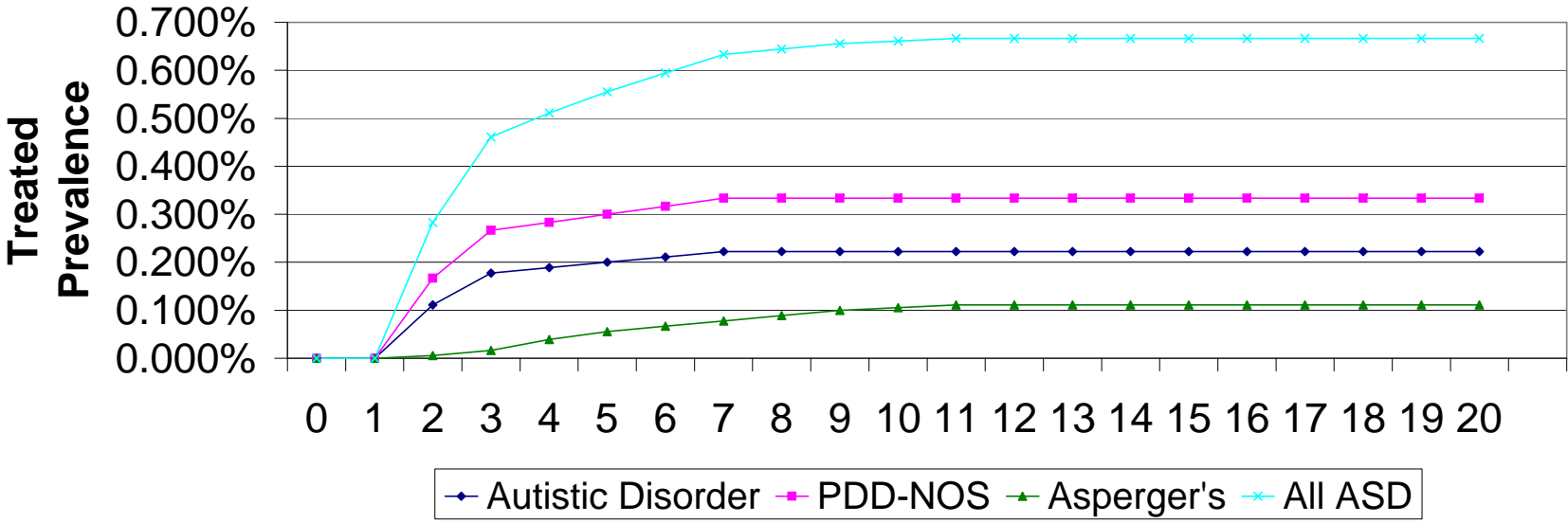
Under 23	\$	3,075
Ages 23 and over	\$	1,538

Annual Limits by Covered Service

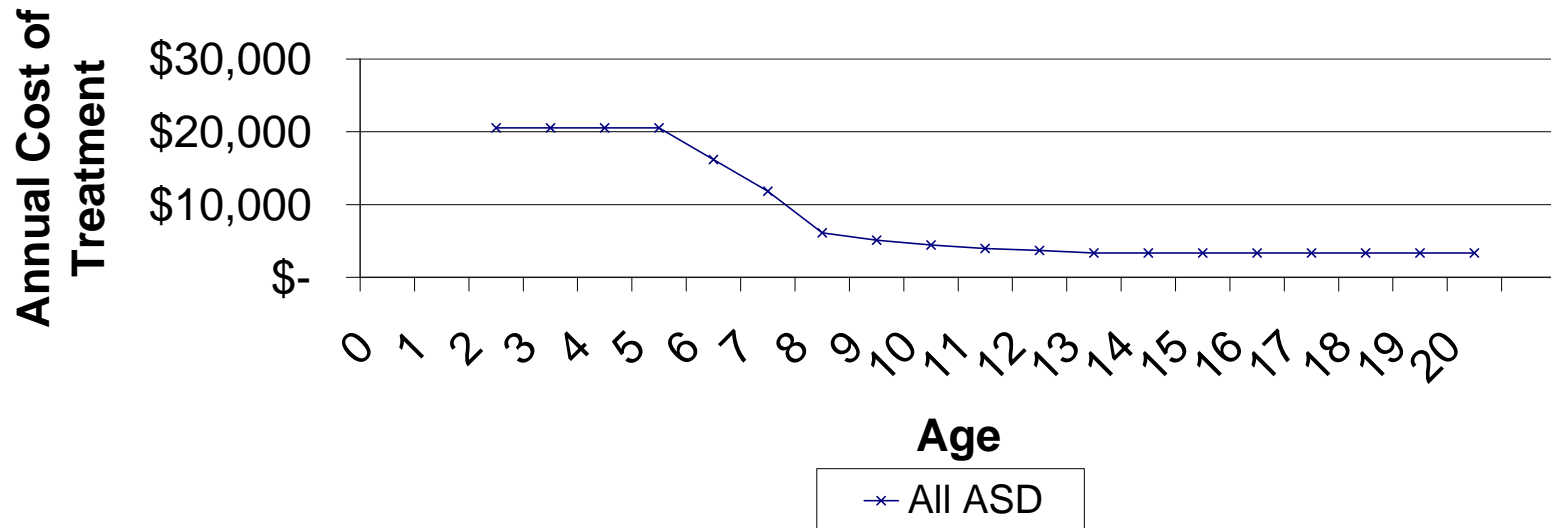
	<u>Hours Limit</u>	<u>Max Hours</u>	<u>Dollar Limit</u>	<u>Max \$s</u>
ABA	No	-	Yes	\$36,000

Average cost of ABA Program: \$30,000

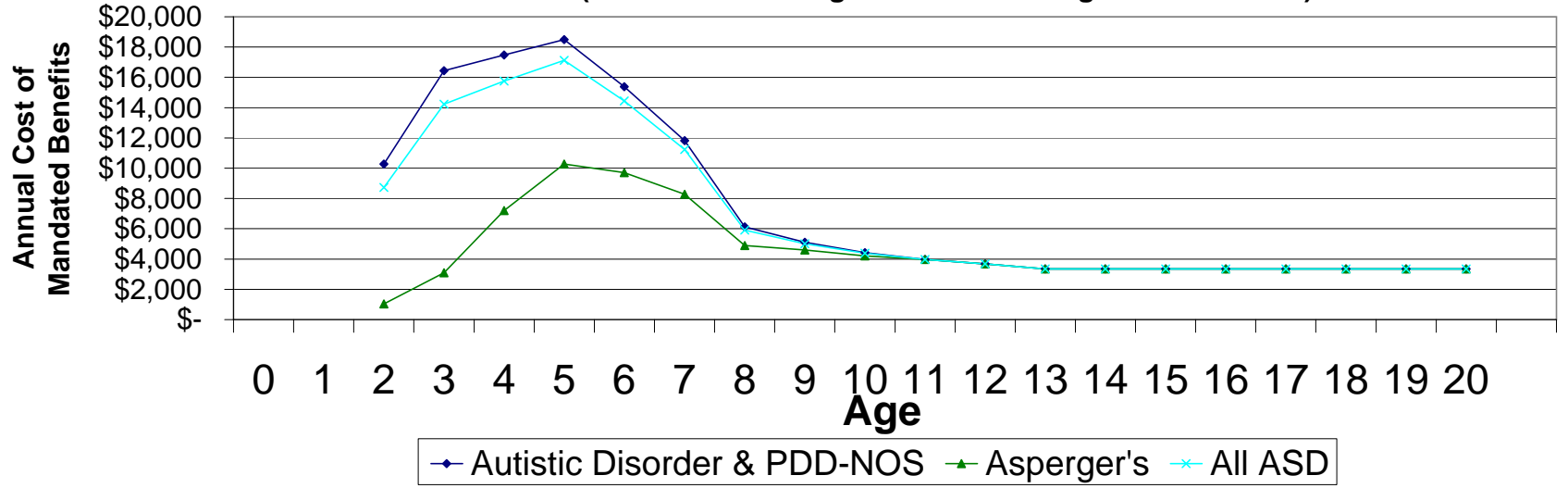
**Exhibit II - Treated Prevalence by Age**



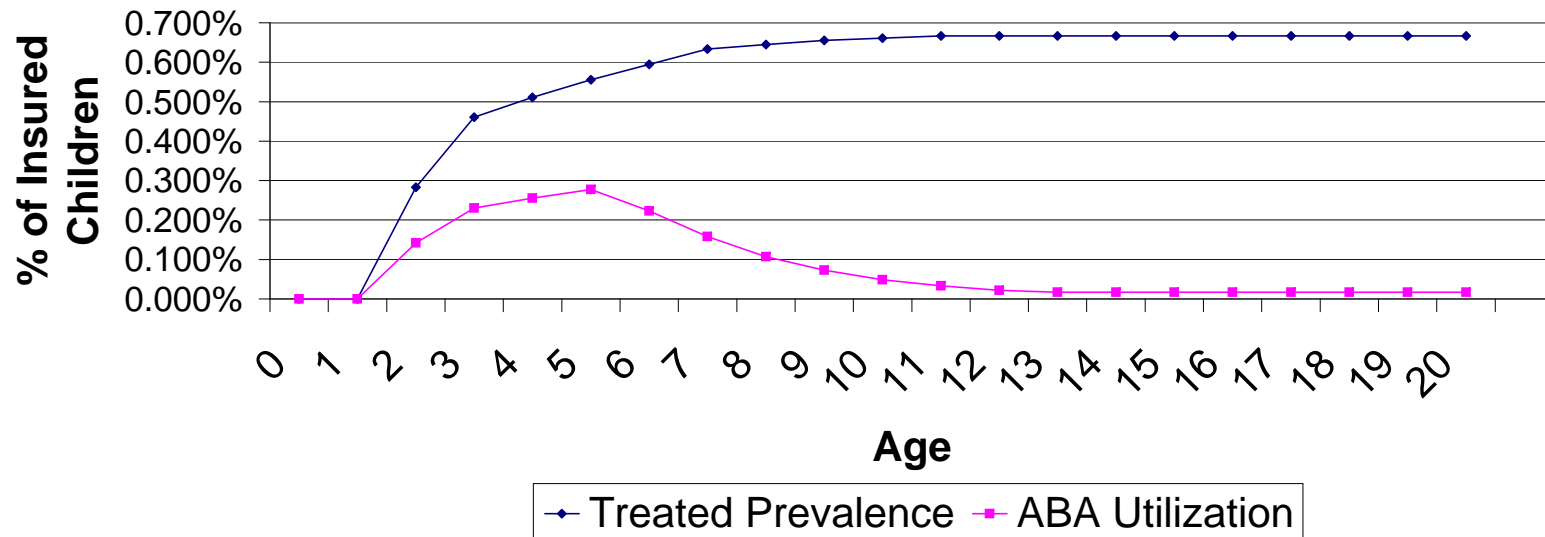
**Exhibit III - Annual Cost Per Diagnosed/Treated Child**



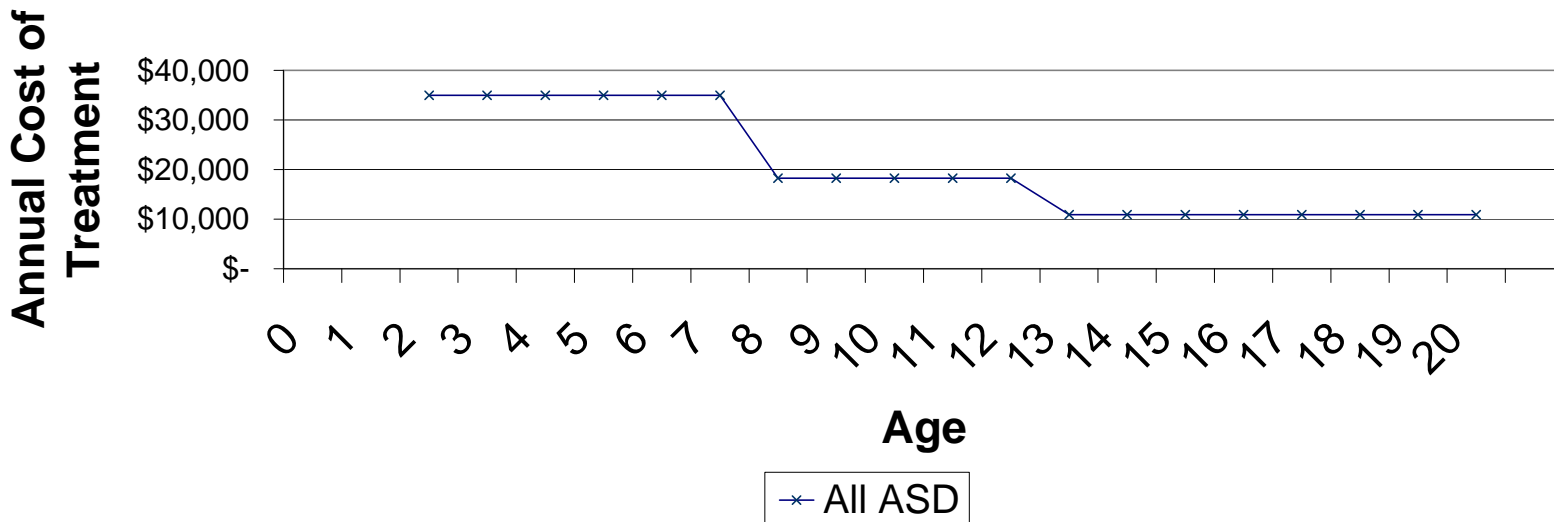
### Exhibit IV - Annual Cost Per Autistic Child (Includes both Diagnosed and Undiagnosed Children)



**Exhibit V - ABA Utilization vs. Treated Prevalence**



## Exhibit VI - Annual Cost per Child With ABA Program



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