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Actuarial Cost Estimate: Virginia House Bill No. 303 and Senate Bill No. 464

Bills Relating to Health Insurance Coverage for
Autism Spectrum Disorder

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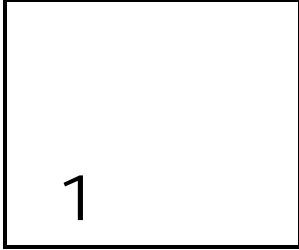
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Executive Summary

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 insurance benefits for autism spectrum disorders (ASD) mandated by Virginia House Bill No. 303 and Senate Bill No. 464 (Bills). The two Bills are identical. The most significant treatment mandated by the Bills is applied behavior analysis, or ABA which accounts for a large portion of the additional costs under the Bills. The key provisions of the Bills are explained further in Section 4 of this report.

Our analysis involved developing a robust model that reflects the likely behavior of consumers, providers and insurers of ABA services and includes Virginia demographic and insurance market information. Key assumptions including the treated prevalence of ASD, the age of diagnosis, ABA program utilization by age, ABA annual costs by age, and additional other (i.e. not ABA) medical costs, as well as the modeling methodology are explained in detail in Sections 5 and 6 of this report and summarized through graphs in the Appendix.

Our analysis included scenario testing to develop cost estimates under a range of assumptions. Our “Middle” estimate is that, in the long-term, costs would increase by about 0.32% of premiums and premiums would increase about 0.38% should House Bill No. 303 and Senate Bill No. 464 be enacted. Our estimated range of long-term premium increases is 0.24% to 0.62% based on our “Low” and “High” estimates. We expect that premium increases would be lower in the years immediately following the passage of a law consistent with the provisions of the Bills, with first year cost increases in the range of 0.08% to 0.41% percent of premiums. Our expectation of lower first year costs is based on experiences in other states that have seen low initial costs when ASD benefits are mandated. These lower costs can be expected due to the lags typically seen in accessing new benefits and the limited supply of ABA providers.

The estimated cost increases for our “Middle” scenario along with some statistics for the large group market are shown in the table below.

Long-Term Cost Estimates - “Middle” Cost Scenario

	Large Group	All
	Covered Persons	1,063,000
Average Premium per Person	\$4,000	\$4,000
Annual Mandate Claim Cost per Covered Person	\$12.80	\$12.80
Claim Cost as a Percentage of Premium	0.32%	0.32%
Estimated Premium Increase with Admin @ 15%	\$15.10	\$15.10
Premium Increase as a Percentage of Premium	0.38%	0.38%

For our scenario testing we varied the assumptions that drive cost estimates. The assumptions under the “Low”, “Middle”, and “High” scenarios and premium increase estimates are summarized in the table below.

Scenario	% Diagnosed Under Age 6 Starting ABA	Avg. Annual ABA Program Cost	Avg. Annual non-ABA Cost	Annual Premium Increase per Person	Premium Increase (% of Premium)
Low	40.0%	\$40,000	\$2,050	\$9.60	0.24%
Middle	50.0%	\$50,000	\$3,075	\$15.10	0.38%
High	66.7%	\$63,738	\$4,100	\$24.70	0.62%

While this analysis focused primarily on estimating the insured costs of mandated medical benefits, in Section 8 we summarize information related to the lifetime costs of ASD which include the costs associated with medical services, education, custodial care, and the lost productivity and wages of individuals affected by ASD, as well as their family caregivers. We also outline the potential savings to government financed education and medical programs associated with effective ASD treatments based on studies noted in the JLARC report: *Report of the Joint Legislative Audit and Review Commission To the Governor and The General Assembly of Virginia* .

Finally, we independently estimate that under assumptions consistent with those noted in JLARC’s report and the insurance cost estimates outlined in this analysis, the cost of ABA benefits could be offset by reductions in Virginia special education expenditures, alone.

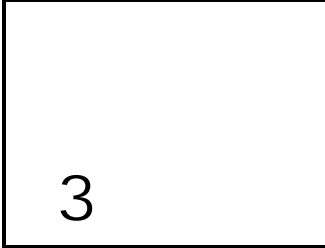
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Background

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 insurance benefits for autism spectrum disorders (ASD) on insurance premiums. As part of this work, Oliver Wyman has developed a range of independent estimates of the impact on insurance premiums of the benefits mandated by Virginia House Bill No. 303 and Senate Bill No. 464, which provide coverage for the diagnosis and treatment of autism spectrum disorders.

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 House Bill No. 303 and Senate Bill No. 464 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 insured costs of the mandated ASD benefits provided for in House Bill No. 303 and Senate Bill No. 464 and the associated premium impact on the large group market affected by House Bill No. 303 and Senate Bill No. 464. This analysis also identifies and partially quantifies identified offsetting cost savings associated with successful ASD treatment.

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 (CAHI) states: “CAHI’s actuarial working team estimates that an autism mandate increases the cost of health insurance by about 1 percent.”¹ The reason for this variability is that the largest component of the increase in costs under House Bill No. 303 and Senate Bill No. 464 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 the insured costs for certain services to increase because ASD exclusions or limitations are common, and certain services that may have been denied or terminated following utilization review might be covered due to the mandate.

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



Description of Key House Bill No. 303 and Senate Bill No. 464 Provisions and their Impact on Covered Benefits

Insurance Markets Covered by the Mandate

The Bills specifically state in Section F that: “*The provisions of this section shall not apply to (iii) policies, contracts, or plans issued in the individual market or small group markets to employers with 50 or fewer employees.*” House Bill No. 303 and Senate Bill No. 464 only impact the commercial large group (51+ employees) insurance market.

Covered Benefits

The Bills provide for the diagnosis and treatment of autism spectrum disorders by stating that “[insurers] shall ...provide coverage for the diagnosis of autism spectrum disorder and the treatment of autism spectrum disorder ...

“Diagnosis of autism spectrum disorder” means medically necessary assessments, evaluations, or tests to diagnose whether an individual has an autism spectrum disorder.

“Treatment for autism spectrum disorder” shall be identified in a treatment plan and includes the following care prescribed, provided, or ordered for an individual diagnosed with one of the autism spectrum disorders by a licensed physician or a licensed psychologist who determines the care to be medically necessary:

- (i) habilitative or rehabilitative care,*
- (ii) pharmacy care,*
- (iii) psychiatric care,*
- (iv) psychological care, and*
- (v) therapeutic care*

“Habilitative or rehabilitative care” means professional, counseling, and guidance services and treatment programs, including applied behavior analysis, that are necessary to develop, maintain, and restore, to the maximum extent practicable, the functioning of an individual.”

The inclusion of applied behavior analysis (ABA), in the definition of “*habilitative or rehabilitative care*” 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 ABA and all similar 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.

Coverage Limits and Maximum Benefits

The Bills do not include any specific benefit limits for ASD services, and further state: “*Coverage under this section will not be subject to any visit limits, and shall neither be different nor separate from coverage for any other illness, condition, or disorder for purposes of determining deductibles, lifetime dollar limits, copayment and coinsurance factors, and benefit year maximum for deductibles and copayment and coinsurance factors.*”

Maximum Age for Benefits

The Bills state that “[*an insurer shall*] provide coverage for the diagnosis of autism spectrum disorder and the treatment of autism spectrum disorder in individuals from the date of diagnosis until the individual completes nine years of age.” Therefore, we have assumed that the Bills would not mandate coverage for ASD services for individuals older than age 9.

Medical Necessity and Treatment Review

The Bills state: “*Nothing shall preclude the undertaking of usual and customary procedures to determine the appropriateness of, and medical necessity for, treatment of autism spectrum disorder under this section, provided that all such appropriateness and medical necessity determinations are made in the same manner as those determinations are made for the treatment of any other illness, condition, or disorder covered by such policy, contract, or plan*”, and “*Except for inpatient services, if an individual is receiving treatment for an autism spectrum disorder, an insurer, corporation, or health maintenance organization shall have the right to request a review of that treatment not more than once every 12 months unless the insurer, corporation, or health maintenance organization and the individual's licensed physician or licensed psychologist agree that a more frequent review is necessary.*”

Therefore, we assume that ASD benefits under the Bills will be subject to utilization review procedures currently in place by insurers. 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 both on a per covered person per year basis, and as a percentage of average annual premiums, as shown in Section 6. Details of key assumptions are discussed in Section 5 and illustrated graphically in the exhibits shown in Appendix 1.

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 diagnosed prevalence estimates.

We would expect that it would take a minimum of several years for both the supply of providers to meet the demand for mandated ASD services and for parents of autistic children to aggressively seek treatment of their children's disorders.

In spite of these real limitations that will likely limit short-term costs associated with mandated autism benefits, we feel that it is appropriate from a public policy perspective to look at the costs over a longer term and assume that both awareness of ASDs will increase and that supply and demand for ASD services would eventually be in balance. We have developed our estimates with this in mind.

Acknowledging that short-term costs are also important to policymakers, in the sections outlining our cost estimates, we have included illustrative exhibits showing the possible progression of costs for mandated benefits by assuming that initial costs would be roughly one-half of the long-term estimates. We also assumed that it would take five years for costs to reach their ultimate levels, although these assumptions varied by cost scenario.

It is also instructive to look at some of the limited evidence available related to actual costs of ABA mandated benefits in other states. Aetna noted in December 2008 that it had tracked the cost of the autism mandate in Texas for its first year of existence and found that it increased costs for policyholders who filed autism-related claims by \$379 a month. A total of 235 policyholders had filed autism claims in the state as of the time the data was released. At that time, the company had not decided whether to pass those costs on to the policyholders because the cost of the mandate might change after the first year.² While this is only first year experience for a single insurer, it illustrates that initial mandate costs are likely low. Aetna's Texas block of business is quite large (approximately \$1.5 - 2.0 billion in premium³), so the statistics provided indicate a mandate cost of less than 0.1% of premium.

General Modeling Process

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

1. A treated prevalence estimate for Virginia was developed based on the Center for Disease Control and Prevention's (CDC) Mortality and Morbidity Weekly Report (MMWR) on autism prevalence dated December 18, 2009.
2. 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.
3. 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.⁴
4. 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.
5. 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.
6. 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.
7. 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.
8. Based on Census demographic data and the cost estimates for mandated ASD services by age as outlined in 1-7 above, an annual cost per covered individual was developed.

² Associated Press. *Lawmaker: Oklahoma autism bill has momentum*. December 4, 2008. <http://newsok.com/article/3327594>. Accessed January 2009.

³ NAIC Annual Statements for 2007.

⁴ IAN database. <http://dashboard.ianexchange.org/StateStatsAdvanced.aspx?A1=VA&ADU=T>. Accessed January 2009.

9. The cost of services was increased to reflect administrative and other insurer costs or profit charges.
10. The estimated size of the covered market was developed based on Census, Medical Expenditure Panel Survey (MEPS) enrollment and premium information for Virginia, and Kaiser Family Foundation coverage data. These assumptions are further documented in Section 5.
11. The cost of the mandated services per covered person and as a percentage of premiums were calculated based on the model cost estimates and market data under a range of assumptions to develop “Low,” “Middle,” and “High” cost scenario estimates.

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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 1 further illustrates these assumptions for the “Middle” scenario.

Treated Prevalence and Age at Diagnosis

The December 18, 2009 CDC MMWR⁵ report included the following information related to the prevalence of ASD:

- 1. Children aged 8 years with a notation of an ASD or descriptions consistent with an ASD were identified through screening and abstraction of existing health and education records containing professional assessments of the child’s developmental progress at health-care or education facilities. Children aged 8 years whose parent(s) or legal guardian(s) resided in the respective areas in 2006 met the case definition for an ASD if their records documented behaviors consistent with the Diagnostic and Statistical Manual of Mental Disorders, 4th edition, text revision (DSM-IV-TR) criteria for autistic disorder, pervasive developmental disorder–not otherwise specified (PDD NOS), or Asperger disorder. Presence of an identified ASD was determined through a review of data abstracted from developmental evaluation records by trained clinician reviewers.⁶*
- 2. In 2006, the overall identified ASD prevalence per 1,000 children aged 8 years varied across ADDM sites ... The average across all 11 sites was 9.0 (CI = 8.6–9.3) per 1,000 children.⁷ A prevalence rate of 9 per 1,000 is approximately 1 in 110.*

⁵ Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report. December 18, 2009. <http://www.cdc.gov/mmwr/>. Accessed January 2010.

⁶ Ibid, p. 1

⁷ Ibid, p. 7

3. *In general, estimated ASD prevalence was lower in ADDM sites that relied solely on health sources to identify cases (mean: 7.5 per 1,000 population; CI = 7.0–7.9) compared with sites that also had access to education sources.*⁸
4. *Among all children meeting the ADDM ASD surveillance case definition, approximately 77% had a documented ASD classification in their records.*⁹
5. *All children initially identified for screening were first stratified by two factors highly associated with final case status: information source (education only, health only, or both types of sources) and the presence or absence of either an ASD ICD-9 code (299.0 or 299.8) or an autism special education eligibility. The potential number of cases missed because of missing records, and the impact on prevalence, was estimated on the assumption that within each of the strata, the proportion of children with missing records who ultimately would be confirmed as having ASD cases would have been similar to that of children for whom no records were missing.*¹⁰

In estimating treated prevalence, which drives medical services utilization and costs, we used the population prevalence as a starting point, and then made adjustments based on details in the MMWR study which would indicate that treated prevalence could be expected to be lower than population prevalence. Treated prevalence rates would be expected to be lower than population prevalence rates for several reasons:

1. As noted in 4. above, approximately 77% of children had documented ASD classification in their records. Without a documented ASD diagnosis, it is not likely that someone would receive treatments for ASD covered by insurance. Note 77% of the 9.0/1000 population prevalence means a documented diagnosis prevalence rate of approximately 1 in 144.
2. There is a reasonable expectation that covered medical ASD services would be supported by documentation in health records. Based on a review of health records, only, the population prevalence of ASD is approximately 7.5/1000, or 1 in 133.
3. The CDC methodology assumed that where records and information were missing, the proportion of children with missing records who ultimately would be confirmed as having ASD cases would have been similar to that of children for whom no records were missing. There is a reasonable likelihood that records would be less likely to be missing for children with documented ASD diagnoses who would seek treatment.
4. With ASD, as with any other disease or disorder, there will be some subset of the diagnosed population that will not seek treatment for any number of reasons.

Based on our analysis of the CDC report, including the key items from the report noted above, a reasonable assumption for the treated prevalence of ASD is 1 in 150. With regard to

⁸ Ibid, p. 7

⁹ Ibid, p. 9

¹⁰ Ibid, p.7

the CDC prevalence estimates for 2007, the JLARC report¹¹ *Report of the Joint Legislative Audit and Review Commission To the Governor and The General Assembly of Virginia* (referenced hereafter as “the JLARC report”) noted the following:

“While the CDC estimates are the best available prevalence rates, medical experts consulted by JLARC staff raised concerns that these estimates may be somewhat high. To determine ASD prevalence, CDC reviewed the medical and educational records of a sample of children residing within the 14 surveillance sites. Children were classified as having an ASD if either (1) they had a documented ASD diagnosis, or (2) their educational or medical records indicated unusual social behaviors consistent with ASDs. Depending on the surveillance site, between 14 and 43 percent of the children who were classified as having an ASD in the CDC estimate did not have a formal ASD diagnosis, but rather displayed ASD-like behaviors based on written records. CDC acknowledges in its study that these cases may have the greatest potential for false-positive classification. Despite this potential methodological issue with CDC’s ASD prevalence estimate, it may be accurate for Virginia. According to data from the Virginia Department of Education (DOE), approximately one out of every 150 eight-year-olds enrolled in Virginia public schools in 2007 had been classified with an ASD and receives special education services for those disorders.”

This excerpt, from the JLARC report, is consistent with our view that the current CDC population prevalence estimate of 1 in 110 is likely too high as an estimate of treated prevalence of ASD for insured services, and that a lower assumption of treated prevalence of 1 in 150 is more reasonable for cost modeling purposes. While there is obvious rationale for modeling cost sensitivities to changes in prevalence, we did not do so since the range of likely costs based on the sensitivity testing outlined in the remainder of this report provides a fairly wide range and illustration of potential costs, and determining the impact on costs of different treated prevalence rates is a simple task.

Prevalence by diagnostic subtype was estimated based on an academic study published in the *American Journal of Psychiatry*.¹² 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.

¹¹ Report of the Joint Legislative Audit and Review Commission To the Governor and The General Assembly of Virginia- Assessment of Services For Virginians with Autism Spectrum Disorders. House Document No. 8, 2009.

¹² Fombonne, E. and S. Chakrabarti. *American Journal of Psychiatry*. June 2005.

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

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

The average age of diagnosis stated in the 2009 CDC MMWR report is 53 months¹³ which is higher than the average age used in our cost modeling of about 42 months, we believe that this difference is reasonable and explainable in that we are using parent reported data that is likely provided by the same parents who would most likely utilize insured benefits. Note a lower age of diagnosis results in higher cost estimates, all other things being equal.

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 olds¹⁴, 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, and likely is conservative in the near-term, we feel that the range is reasonable since insurers will likely have some conservatism in their cost estimates and premium rates. Private insurance utilization will also 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

¹³ Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report. December 18, 2009. p. 9.

¹⁴ 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.

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 by the time they reach 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.

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:

% of Diagnosed Children w/ ABA	
Under 6	50.0%
6	37.5%
7	25.0%
8	16.7%
9	11.1%

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.¹⁵ We developed a distribution of expected hours that resulted in the annual averages shown in the table below:

Average ABA Program Hours	
Ages Under 8	1,500
Ages 8 & 9	671

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. It 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 Virginia, based on Bureau of Labor Statistics¹⁶ health care wage data. The resulting average cost per hour of ABA therapy in Virginia is \$45.45 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.

¹⁵ Autism Therapy Reference- Microsoft Corporation (administered by Premera Blue Cross).

¹⁶ 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:

“Low” cost scenario - assumes average ABA program cost is \$40,000 per year.

“Middle” cost scenario - assumes average ABA program cost is \$50,000 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 \$45.45, the calculated average annual cost for an ABA program for all ages is \$63,738.

Other (than ABA) Medical Costs

Based on several studies¹⁷, 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 of 50% to 100% of the current level of estimated covered non-inpatient costs for services to children diagnosed with an ASD which we assumed are currently three times higher than the population costs in the absence of the benefit mandates under House Bill No. 303 and Senate Bill No. 464.

The estimated annual cost for additional non-ABA services (note many non-ABA medical services are already provided to individuals with ASD) that would be covered as a result of the mandate are shown for each scenario in the table below:

Scenario	Non-ABA Medical Costs
Low	\$2,050
Middle	\$3,075
High	\$4,100

(Amounts in 2010 dollars)

Administrative Costs

Typically, medical claim costs could be expected to be 80 to 90% of premiums, meaning 10 to 20% of premiums are available for administration, profit, or other costs, often collectively referred to as “retention.” We have estimated the incremental retention charge to be 15% of premium.

¹⁷ Mandell, Cao, Ittenbach, & Pinto-Martin, 2006. Croen, Najjar, Ray, Lotspeich, & Bernal, 2006. Liptak, Stuart, & Auinger, 2006.

Virginia Market Data

The MEPS survey provides average premiums, enrollees, offer rates, take-up rates, and self-insured percentages by employer size for healthcare coverage sponsored by privately insured employers. From this data we can estimate the size of the privately insured small group, insured large group, and self-insured markets. State-specific premium data for Virginia was available for 2006¹⁸, so we trended this based on average recent employer premium increases provided from the Kaiser Family Foundation HRET¹⁹ survey to estimate the 2010 average annual premium per member necessary to compute the cost of mandated benefits as a percentage of annual premiums.

As part of our development of premiums and membership estimates, we completed reasonableness tests by reviewing Virginia insurer annual statement exhibits to ensure that the group premium estimate is not unreasonable.

¹⁸ MEPS state survey data. http://www.meps.ahrq.gov/mepsweb/data_stats/state_tables.jsp?regionid=-1&year=-1. Accessed January 2009.

¹⁹ Kaiser Family Foundation and Health Research Educational Trust. Employer Health Benefits- 2008 Annual Survey.



Cost Estimates

Long-Term Cost Estimates - “Middle” Cost Scenario

The table below summarizes our “Middle” scenario average annual cost estimates and premium increases on a per covered person basis, and as a percentage of the annual premiums. Our “Middle” estimate is that, in the long-term, the premium increase associated with the mandated benefits provided by House Bill No. 303 and Senate Bill No. 464 would be about 0.38% of insured large group premiums. However, we expect that costs would be lower in the years immediately following the passage of the mandate based on experiences in other states that have mandated ASD benefits, lags typically seen in accessing new benefits, and the limited supply of ABA providers.

The estimated cost increases for the large group market is shown in the table below. The annual claim cost per covered person estimate of \$12.80 and premium increase of \$15.10 is in 2010 dollars.

	Large Group	All
Covered Persons	1,063,000	1,063,000
Average Premium per Person	\$4,000	\$4,000
Annual Mandate Claim Cost per Covered Person	\$12.80	\$12.80
Claim Cost as a Percentage of Premium	0.32%	0.32%
Estimated Premium Increase with Admin @ 15%	\$15.10	\$15.10
Premium Increase as a Percentage of Premium	0.38%	0.38%

Scenario Estimates

As discussed in Section 1, very little insurance data exists that can be used to directly estimate the costs of ABA benefits mandated by House Bill No. 303 and Senate Bill No. 464. This causes uncertainty in developing actuarial assumptions and cost estimates. Due to this uncertainty, it is useful to develop cost estimates for scenarios using optimistic and pessimistic assumptions.

Cost estimates are very sensitive to various assumptions, especially those related to ABA utilization and costs. Therefore, we varied our assumptions to develop estimated costs for ASD services under “Low,” “Middle,” and “High” cost scenarios, as shown in the table below:

Scenario	% Diagnosed Under Age 6 Starting ABA	Avg. Annual ABA Program Cost	Avg. Annual non-ABA Cost	Annual Premium Increase per Person	Premium Increase (% of Premium)
Low	40.0%	\$40,000	\$2,050	\$9.60	0.24%
Middle	50.0%	\$50,000	\$3,075	\$15.10	0.38%
High	66.7%	\$63,738	\$4,100	\$24.70	0.62%

Short-Term Cost Estimates by Scenario

In addition to the uncertainty associated with long-term cost estimates, how quickly costs could reach their ultimate level due to the limited supply of ABA therapists is also uncertain. We have provided the table below to illustrate the potential short-term increases in premiums, and how they could grade into the long-term estimates over time.

Estimated Increase in Premiums due to Virginia HB 303/SB 464						
Scenario	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6 and Beyond
Low	0.08%	0.11%	0.14%	0.18%	0.21%	0.24%
Middle	0.19%	0.23%	0.26%	0.30%	0.34%	0.38%
High	0.41%	0.45%	0.49%	0.54%	0.58%	0.62%

8

Cost – Benefit Analysis for ASD Treatments

There have been several studies related to the efficacy of ABA treatment programs, and the costs associated with ASD treatments, care, and supports. In this section, we seek to summarize some of these studies and to develop an independent estimate of the potential cost savings of early interventions for educational services based on the cost estimates for ABA outlined in this report, the efficacy of ABA programs based on the results of the studies cited in the JLARC report, and actual Virginia special education costs.

Societal Costs of Autism- Ganz Report

One of the most often cited reports explaining the financial costs of ASD is *The Lifetime Distribution of the Incremental Societal Costs of Autism* by Michael Ganz, MS, PhD was published in 2007. This report summarized the modeled costs of a hypothetical cohort of children born in 2000 and diagnosed with autism in 2003. A study result is that the incremental societal cost of autism is \$3.2 million per capita in 2003 dollars.²⁰ The report is very helpful in identifying specific costs of ASD, and in providing a framework for quantifying these costs, as well as providing actual cost estimates.

Direct Medical

- Physician and Dental
- Drugs
- Complementary and Alternative Therapies
- Behavioral Therapies
- Emergency and Hospital
- Home Healthcare
- Travel

²⁰ Ganz, Michael L. *The Lifetime Distribution of the Incremental Societal Costs of Autism*. Archives of Pediatrics & Adolescent Medicine. April 2007. Volume 161.

Direct Nonmedical

- Child Care
- Adult Care
- Respite Care
- Home Improvements
- Special Education
- Supported Work
- Other

Indirect

- Own Indirect- lost productivity and lower wages
- Not Own Indirect - lost productivity and lower wages of others (typically family)

Cost Savings to State and Local Governments based on JLARC Report

The Ganz study is probably the most comprehensive in terms of assessing the breadth of the financial costs associated with caring for individuals with ASD. Several other studies have attempted more limited quantifications of costs and savings to governments associated with providing early intensive behavioral interventions (EIBI) or ABA programs for young children. The JLARC report in Chapter 2 beginning on page 14 states “ASD Treatment Can Reduce Costs” and summarizes the financial results of these cost-benefit studies.

In summary, the studies quantify the costs of EIBI, assume success rates associated with EIBI based on efficacy studies, and then assume cost savings to educational and other government financed programs like Medicaid associated with these treatments. The JLARC report outlines their assessment of the cost savings associated with EIBI as follows²¹:

“A study published in a national journal found that Pennsylvania could save an average of \$187,000 to \$203,000 on each child who received three years of EIBI relative to one who received special education services until age 22. The Pennsylvania study also suggested that cost savings would likely continue to accrue after children exit the school system. The study found that the state could save from \$656,000 to \$1.1 million per child if expenditures up to age 55 are included. Another study published in a national journal found that Texas could save an average of \$208,500 in education costs for each student who received three years of EIBI relative to a student who received 18 years of special education from ages four to 22. Applied to the estimated 10,000 children with ASDs in Texas, it was estimated that the state could save almost \$2.1 billion by implementing intensive treatment programs.

By applying the methodology used in the Pennsylvania and Texas studies to Virginia-related data, JLARC staff estimate that the Commonwealth could save approximately \$137,400 in special education costs per student with an ASD if EIBI was consistently provided. In fact, the analysis indicates that Virginia could realize savings as long as at least 42 percent of students with ASDs who received EIBI make moderate improvements (require less intensive services and fewer supports), which is a substantially more conservative outcome than the outcomes reported in the research literature.”

²¹ JLARC, p. 15.

The actual success rates of EIBI treatments will drive the benefits derived from these treatments. Also, as noted in the JLARC report, moderate improvements in functioning could also lead to significant financial savings. The JLARC report also discusses various studies of the efficacy of EIBI beginning on page 13 with the heading “ASD Treatment Can Improve Functioning.” Table 3 on page 15 of the JLARC report summarizes the efficacy of EIBI based on three research studies. This table is reproduced below:

Table 3: Multiple Studies Demonstrate Children Who Receive Intensive Treatment Fare Better Than Those Who Receive Less Intensive Services

Group	Outcomes	
	Average Change in IQ Points	Educational Placement
<i>EIBI compared to less intensive public school special education (2006 study)</i>		
Treatment	+25	<ul style="list-style-type: none"> ▪ 29% in general class without supports ▪ 52% in general class with supports
Comparison	+14	<ul style="list-style-type: none"> ▪ 5% in general class
<i>EIBI compared to less intensive parent-training model (2000 study)</i>		
Treatment	+16	<ul style="list-style-type: none"> ▪ 27% in general class without supports
Comparison	-1	<ul style="list-style-type: none"> ▪ No children in general class without supports
<i>EIBI compared to less intensive treatment (1987 study)</i>		
Treatment	<ul style="list-style-type: none"> ▪ 47% achieved IQ in normal range (94-120) 	<ul style="list-style-type: none"> ▪ 47% in general class without supports ▪ 42% in less intensive special education class for language delayed ▪ 11% in intensive special education class for children with autism or intellectual disability (ID)
Comparison	<ul style="list-style-type: none"> ▪ 2% achieved IQ in normal range 	<ul style="list-style-type: none"> ▪ 2% in general class without supports ▪ 45% in less intensive special education class for language delayed ▪ 53% in intensive special education class for children with autism or ID

Note: A more detailed table on the results of these studies can be found in Appendix C.

Limited Cost-Benefit Analysis for Virginia Special Education

We completed an analysis to assess the costs of ABA based on the assumptions underlying our “Middle” cost estimate relative to the benefit of savings that could be expected due to decreased expenditures for special education for students who are able to better function in a school setting due to successful ABA treatment. The study is limited in that it looks at only one area of financial benefit associated with improved functioning. As noted in the Ganz study and the beginning of this section, there are multiple areas where financial benefits can be realized through successful treatment of ASD, not to mention, non-economic benefits for affected individuals and society in general that are also not quantified in this report.

Methodology and Assumptions:

- 1) Based on the modeling of ABA costs outlined in this report, develop the total expected cost for ABA treatments for the cohort of children who utilize ABA services.

Assumption: Based on our modeling, the lifetime average ABA costs in 2010 dollars for the 50% of children assumed to have an intensive ABA program is approximately \$220,000.

- 2) Develop an estimate of the additional annual educational costs for providing intensive ASD services, and less intensive services relative to average student costs without special education.

Assumption: For 2007, per JLARC, additional incremental ASD special education costs were about \$21,000 per student. For the 2000-2001 school year, these same incremental costs were about \$12,000.²² This would indicate an annual growth rate of 8% in per capita student spending for ASD services. Assuming a lower 5% inflation rate, we estimate the average 2010 cost is \$24,000. No detailed information was found regarding the costs of intensive special education versus less intensive special education for students with ASD.

Based on the Jacobson study, which included an intensive special education cost estimate relative to less intensive special education costs²³ and anecdotal information regarding the high costs of educating severely affected autistic children, we assumed that intensive special education costs would be about 250% of the less intensive costs for ASD students.

- 3) Develop an estimate of the efficacy of intensive ABA treatments reflected in school classroom placement based on the studies noted in the JLARC report shown in the table on the previous page.

Assumption: We assumed percentages of students in general classroom, in less intensive special education, and in intensive special education settings with and without an early intensive ABA program based on the study outlined in the JLARC report on page 14.

- 4) Inflation and Interest- for simplicity we did not inflate or discount the future costs of ABA programs or special education. ABA and special education costs could be expected to increase at similar rates over time due primarily to wage inflation, and discounting would typically be done at a fairly low rate for state and local governments. The impact of any inflation or interest assumptions would not be significant nor add much, other than complexity, to this cost benefit analysis.

²² http://www.doe.virginia.gov/VDOE/Instruction/Sped/by_disabil.pdf. Accessed January 2010.

²³ Jacobson, J.W., Mullick, J.A. and Green G. *Cost – Benefit Estimates for Early Intensive Behavioral Intervention for Young Children with Autism- General Model and Single State Case*. Behavioral Interventions, 13, 201-226 (1998)..

- 5) Develop cost savings estimates, the formulas for estimated costs and benefits are as follows:

$$\text{Cost} = \text{Estimated cost of ABA program for children who utilize an ABA program} \\ \$220,000$$

$$\text{Benefit} = 15 \text{ years (estimated years post-ABA to age 22)} \\ \times \text{average special education cost difference with and without ABA} \\ \text{intervention based on the assumed percentages of students in each} \\ \text{educational environment and the associated costs for each environment.}$$

The results of the analysis shown below under the assumptions that reasonably reflect real costs and scientific findings regarding treatment efficacy shown by JLARC report indicate that the cost of ABA programs can be paid for by savings in special education expenditures alone, under the set of assumptions noted. As stated previously, this analysis is limited to quantifying cost and benefits under a single set of assumptions for a single area where financial savings would be realized through successful treatment of ASD. The cost-benefit analysis is meant to be illustrative, and does not consider significant savings that could be achieved in the other areas noted at the beginning of this section through successful ASD treatments.

Intensive Special Education @ 250% of Less Intensive Special Education				
ABA Program Cost Estimate	Average Annual Cost	% of Students with ABA	% of Students without ABA	Benefit/(Cost) (\$220,000)
Intensive Special Ed	\$34,286	11%	53%	
Less intensive Special Ed	\$13,714	42%	45%	
Normal Classroom*	\$0	47%	2%	
Average Annual Cost with/without ABA		\$9,531	\$24,343	
Education Cost Reduction for 15 years				\$222,171
Net Benefit/(Cost)				\$2,171

* Note: education costs are incremental over the annual cost in a Normal classroom



Cost Assumptions – Illustrative Exhibits and
House Bill No. 303 and Senate Bill No. 464 Text

EXHIBIT I - SUMMARY OF HB 303 / SB 464 "MIDDLE" SCENARIO ASSUMPTIONS AND COSTS

<u>State</u>	Virginia	<u>Key Assumptions:</u>		
		<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
		PDD-NOS	1 in 300	3
		Asperger's	1 in 900	6
		All ASD	1 in 150	
				Under 6 50.0%
				6 37.5%
				7 25.0%
				8 16.7%
				9 11.1%
<u>Age Limits for Autism Benefits</u>				
Minimum	0			
Maximum	9			
<u>Additional Annual Medical Costs for Non ABA Services</u>		<u>Virginia Prevalence</u>		
Under 10 \$	3,075	<u>Diagnostic Subtype</u>	<u>Ultimate Prevalence</u>	<u>Average Age of Diagnosis</u>
		Autistic Disorder	1 in 450	3
		PDD-NOS	1 in 300	3
		Asperger's	1 in 900	6
		All ASD	1 in 150	
				<u>Average ABA Program Hours</u>
				Ages Under 8 1,500
				Ages 8 & 9 671
<u>Annual Limits by Covered Service</u>				
ABA	Hours Limit	Max Hours	Dollar Limit	Max \$s
	No	-	No	No Cap
				Average cost of ABA Program: \$50,000

Market
Large Group
Total

Coverage Estimates		
Number of Persons Covered	Premium (Per Person)	Total Premium
1,063,000	\$ 4,000	\$ 4,252,000,000
1,063,000	\$ 4,000	\$ 4,252,000,000

Costs Excluding Administrative Expense			Premium Increase including Admin @ 15%		
Costs	Costs (% of Premium)	Cost (Per Covered Person)	Incremental Premium	Premium Increase %	Annual Increase per Covered Person
\$ 13,606,400	0.32%	\$ 12.80	\$ 16,008,000	0.38%	\$ 15.10
\$ 13,606,400	0.32%	\$ 12.80	\$ 16,008,000	0.38%	\$ 15.10

Exhibit II - Treated Prevalence by Age

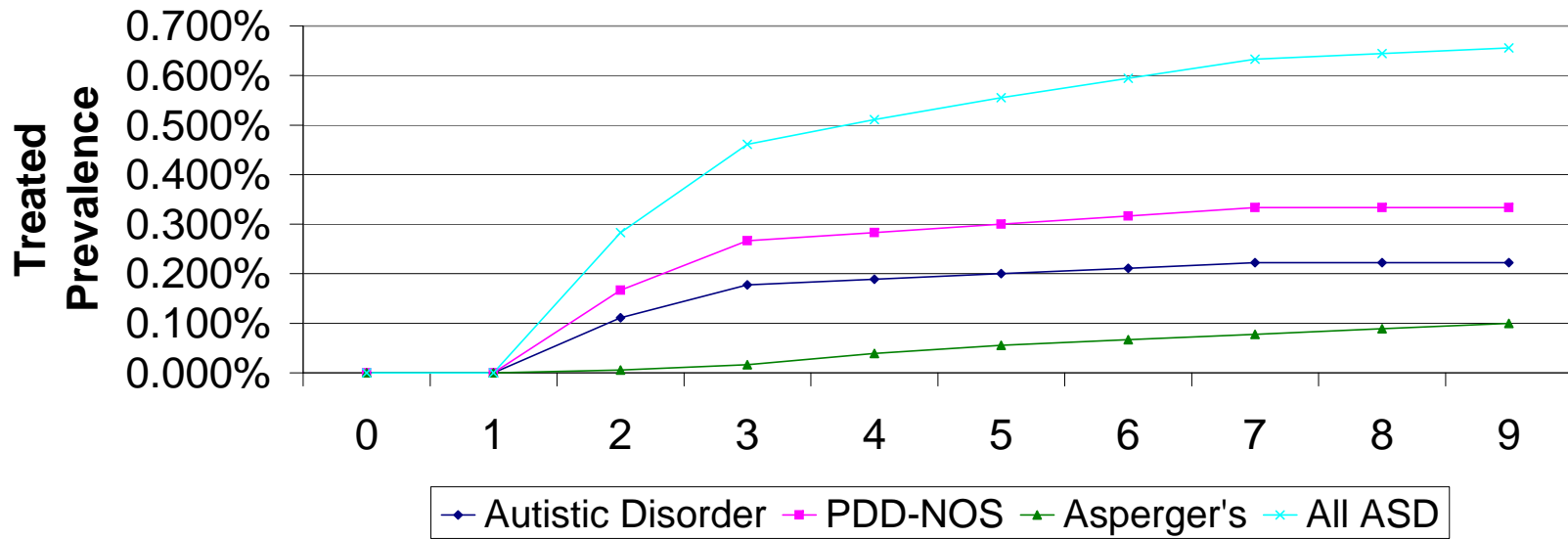


Exhibit III - Annual Cost Per Diagnosed/Treated Child

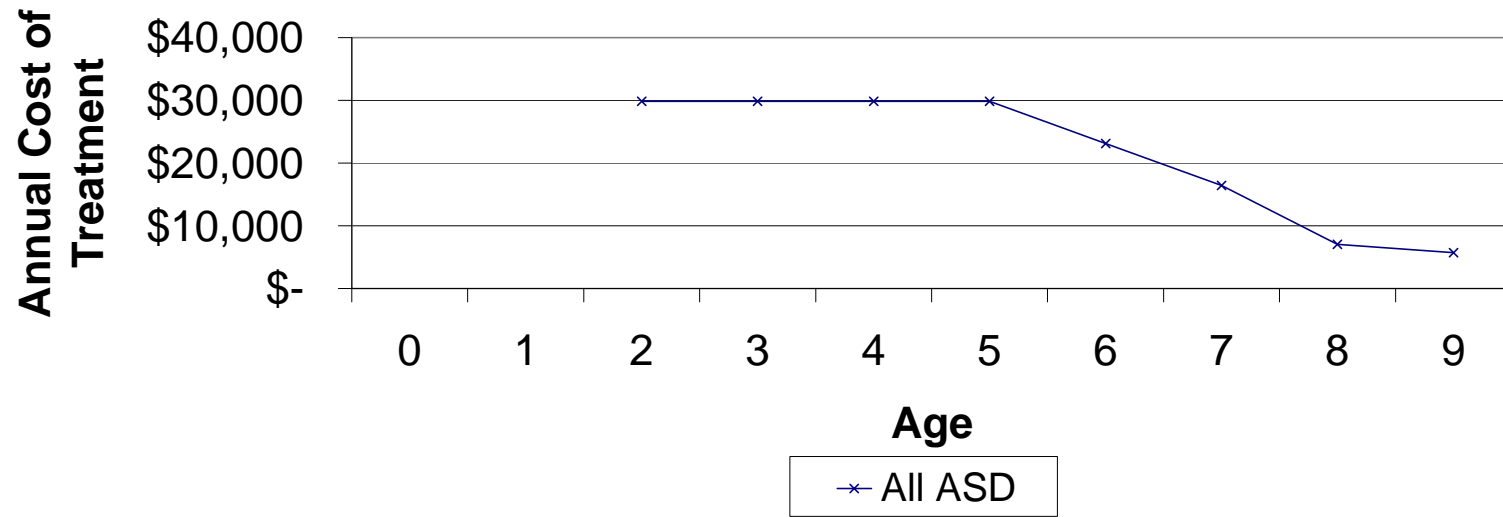


Exhibit IV - Annual Cost Per Autistic Child (Includes both Diagnosed and Undiagnosed Children)

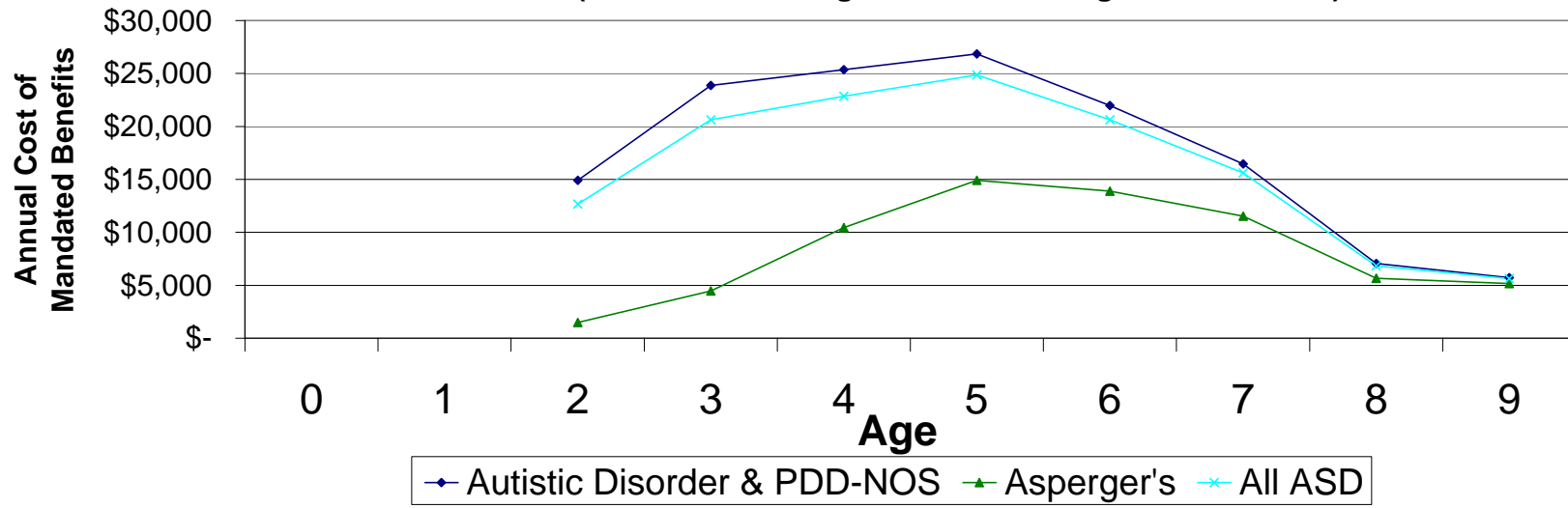


Exhibit V - ABA Utilization vs. Treated Prevalence

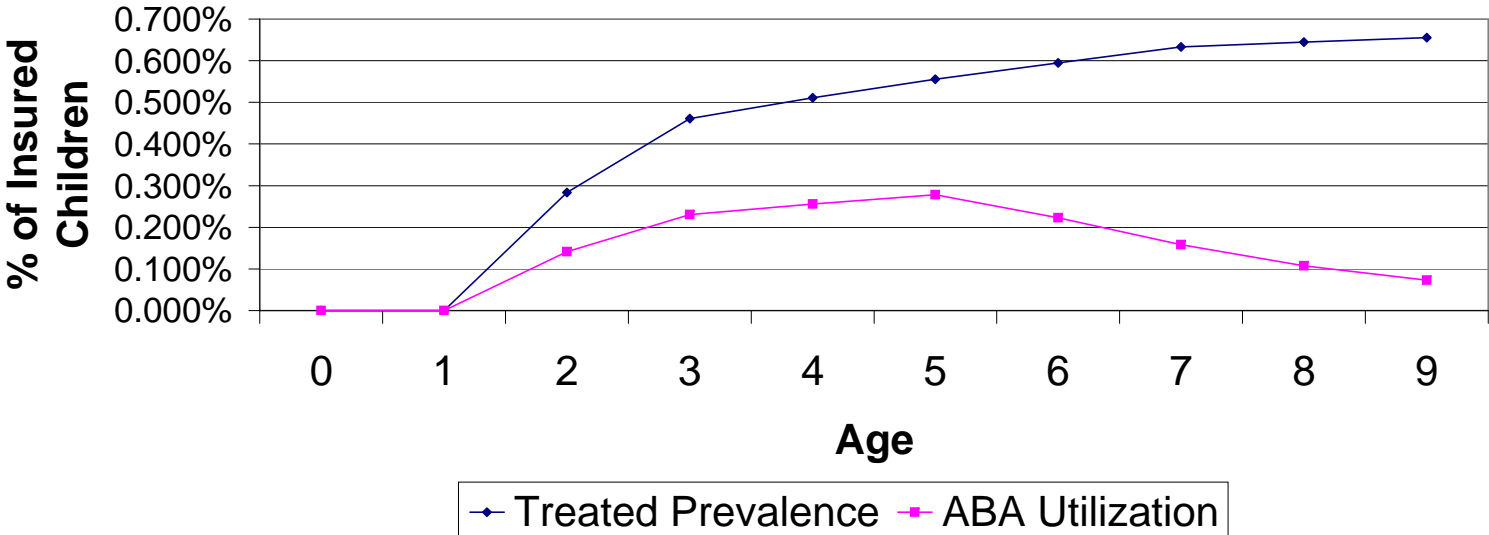
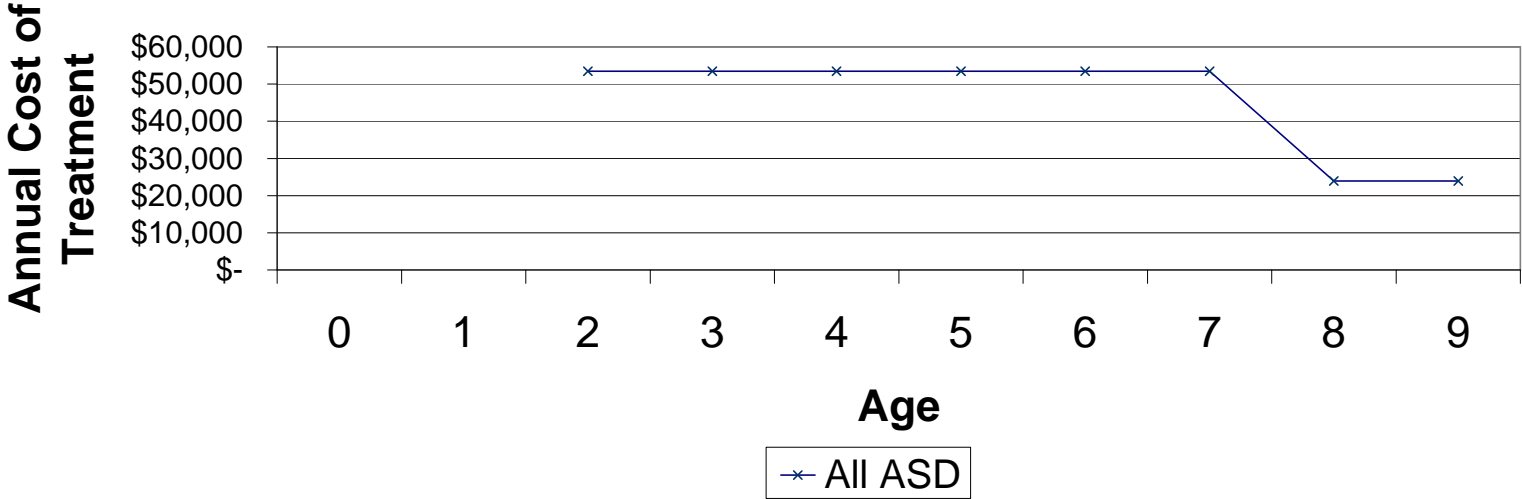


Exhibit VI - Annual Cost per Child With ABA Program



10100554D

HOUSE BILL NO. 303

Offered January 13, 2010

Prefiled January 11, 2010

A BILL to amend and reenact § 38.2-4319 of the Code of Virginia and to amend the Code of Virginia by adding a section numbered 38.2-3418.16, relating to health insurance coverage for autism spectrum disorder.

Patron—O'Bannon

Referred to Committee on Commerce and Labor

Be it enacted by the General Assembly of Virginia:

1. That § 38.2-4319 of the Code of Virginia is amended and reenacted and that the Code of Virginia is amended by adding a section numbered 38.2-3418.16 as follows:

§ 38.2-3418.16. Coverage for autism spectrum disorder.

A. Notwithstanding the provisions of § 38.2-3419, each insurer proposing to issue group accident and sickness insurance policies providing hospital, medical and surgical, or major medical coverage on an expense-incurred basis; each corporation providing group accident and sickness subscription contracts; and each health maintenance organization providing a health care plan for health care services shall, as provided in this section, provide coverage for the diagnosis of autism spectrum disorder and the treatment of autism spectrum disorder in individuals from the date of diagnosis until the individual completes nine years of age. If an individual who is being treated for autism spectrum disorder becomes ten years of age or older and continues to need treatment, this section does not preclude coverage of treatment and services. In addition to the requirements imposed on health insurance issuers by § 38.2-3436, an insurer shall not terminate coverage, or refuse to deliver, issue, amend, adjust, or renew coverage, to an individual solely because the individual is diagnosed with one of the autism spectrum disorders or has received treatment for autism spectrum disorder.

B. For purposes of this section:

"Applied behavior analysis" means the design, implementation, and evaluation of environmental modifications, using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct observation, measurement, and functional analysis of the relationship between environment and behavior.

"Autism spectrum disorder" means any pervasive developmental disorder, including (i) autistic disorder, (ii) Asperger's Syndrome, (iii) Rett syndrome, (iv) childhood disintegrative disorder, or (v) Pervasive Developmental Disorder - Not Otherwise Specified, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.

"Diagnosis of autism spectrum disorder" means medically necessary assessments, evaluations, or tests to diagnose whether an individual has an autism spectrum disorder.

"Habilitative or rehabilitative care" means professional, counseling, and guidance services and treatment programs, including applied behavior analysis, that are necessary to develop, maintain, or restore, to the maximum extent practicable, the functioning of an individual.

"Pharmacy care" means medications prescribed by a licensed physician and any health-related services deemed medically necessary to determine the need or effectiveness of the medications.

"Psychiatric care" means direct or consultative services provided by a psychiatrist licensed in the state in which the psychiatrist practices.

"Psychological care" means direct or consultative services provided by a psychologist licensed in the state in which the psychologist practices.

"Therapeutic care" means services provided by licensed or certified speech therapists, occupational therapists, physical therapists, or clinical social workers.

"Treatment for autism spectrum disorder" shall be identified in a treatment plan and includes the following care prescribed, provided, or ordered for an individual diagnosed with one of the autism spectrum disorders by a licensed physician or a licensed psychologist who determines the care to be medically necessary: (i) habilitative or rehabilitative care, (ii) pharmacy care, (iii) psychiatric care, (iv) psychological care, and (v) therapeutic care.

"Treatment plan" means a plan for the treatment of autism spectrum disorder developed by a licensed physician or a licensed psychologist pursuant to a comprehensive evaluation or reevaluation performed in a manner consistent with the most recent clinical report or recommendation of the American Academy of Pediatrics or the American Academy of Child and Adolescent Psychiatry.

C. Except for inpatient services, if an individual is receiving treatment for an autism spectrum

INTRODUCED

HB303

59 disorder, an insurer, corporation, or health maintenance organization shall have the right to request a
 60 review of that treatment not more than once every 12 months, unless the insurer, corporation, or health
 61 maintenance organization and the individual's licensed physician or licensed psychologist agree that a
 62 more frequent review is necessary. The cost of obtaining any review shall be covered under the policy,
 63 contract, or plan.

64 D. Coverage under this section will not be subject to any visit limits, and shall neither be different
 65 nor separate from coverage for any other illness, condition, or disorder for purposes of determining
 66 deductibles, lifetime dollar limits, copayment and coinsurance factors, and benefit year maximum for
 67 deductibles and copayment and coinsurance factors.

68 E. Nothing shall preclude the undertaking of usual and customary procedures to determine the
 69 appropriateness of, and medical necessity for, treatment of autism spectrum disorder under this section,
 70 provided that all such appropriateness and medical necessity determinations are made in the same
 71 manner as those determinations are made for the treatment of any other illness, condition, or disorder
 72 covered by such policy, contract, or plan.

73 F. The provisions of this section shall not apply to (i) short-term travel, accident only, limited, or
 74 specified disease policies; (ii) short-term nonrenewable policies of not more than six months' duration;
 75 (iii) policies, contracts, or plans issued in the individual market or small group markets to employers
 76 with 50 or fewer employees, or (iv) policies or contracts designed for issuance to persons eligible for
 77 coverage under Title XVIII of the Social Security Act, known as Medicare, or any other similar
 78 coverage under state or federal governmental plans.

79 G. The requirements of this section shall apply to all insurance policies, subscription contracts, and
 80 health care plans delivered, issued for delivery, reissued, or extended on or after January 1, 2011, and
 81 to all such policies, contracts, or plans to which a term is changed or any premium adjustment is made
 82 on or after such date.

83 H. Any coverage required pursuant to this section shall be in addition to the coverage required by
 84 § 38.2-3418.5 and other provisions of law. This section shall not be construed as diminishing any
 85 coverage required by § 38.2-3412.1:01. This section shall not be construed as affecting any obligation
 86 to provide services to an individual under an individualized family service plan, an individualized
 87 education program, or an individualized service plan.

88 I. Notwithstanding the provisions of § 2.2-2818.2, this section shall not apply to health coverage
 89 offered to state employees pursuant to § 2.2-2818 until July 1, 2015.

90 § 38.2-4319. Statutory construction and relationship to other laws.

91 A. No provisions of this title except this chapter and, insofar as they are not inconsistent with this
 92 chapter, §§ 38.2-100, 38.2-136, 38.2-200, 38.2-203, 38.2-209 through 38.2-213, 38.2-216, 38.2-218
 93 through 38.2-225, 38.2-229, 38.2-232, 38.2-305, 38.2-316, 38.2-322, 38.2-400, 38.2-402 through
 94 38.2-413, 38.2-500 through 38.2-515, 38.2-600 through 38.2-620, Chapter 9 (§ 38.2-900 et seq.),
 95 §§ 38.2-1016.1 through 38.2-1023, 38.2-1057, Article 2 (§ 38.2-1306.2 et seq.), § 38.2-1306.1,
 96 § 38.2-1315.1, Articles 3.1 (§ 38.2-1316.1 et seq.), 4 (§ 38.2-1317 et seq.) and 5 (§ 38.2-1322 et seq.) of
 97 Chapter 13, Articles 1 (§ 38.2-1400 et seq.) and 2 (§ 38.2-1412 et seq.) of Chapter 14, §§ 38.2-1800
 98 through 38.2-1836, 38.2-3401, 38.2-3405, 38.2-3405.1, 38.2-3407.2 through 38.2-3407.6:1, 38.2-3407.9
 99 through 38.2-3407.16, 38.2-3411.2, 38.2-3411.3, 38.2-3411.4, 38.2-3412.1:01, 38.2-3414.1, 38.2-3418.1
 100 through 38.2-3418.15 38.2-3418.16, 38.2-3419.1, 38.2-3430.1 through 38.2-3437, 38.2-3500, subdivision
 101 13 of § 38.2-3503, subdivision 8 of § 38.2-3504, §§ 38.2-3514.1, 38.2-3514.2, 38.2-3522.1 through
 102 38.2-3523.4, 38.2-3525, 38.2-3540.1, 38.2-3541.1, 38.2-3542, 38.2-3543.2, Article 5 (§ 38.2-3551 et
 103 seq.) of Chapter 35, Chapter 52 (§ 38.2-5200 et seq.), Chapter 55 (§ 38.2-5500 et seq.), Chapter 58
 104 (§ 38.2-5800 et seq.) and § 38.2-5903 of this title shall be applicable to any health maintenance
 105 organization granted a license under this chapter. This chapter shall not apply to an insurer or health
 106 services plan licensed and regulated in conformance with the insurance laws or Chapter 42 (§ 38.2-4200
 107 et seq.) of this title except with respect to the activities of its health maintenance organization.

108 B. For plans administered by the Department of Medical Assistance Services that provide benefits
 109 pursuant to Title XIX or Title XXI of the Social Security Act, as amended, no provisions of this title
 110 except this chapter and, insofar as they are not inconsistent with this chapter, §§ 38.2-100, 38.2-136,
 111 38.2-200, 38.2-203, 38.2-209 through 38.2-213, 38.2-216, 38.2-218 through 38.2-225, 38.2-229,
 112 38.2-232, 38.2-322, 38.2-400, 38.2-402 through 38.2-413, 38.2-500 through 38.2-515, 38.2-600 through
 113 38.2-620, Chapter 9 (§ 38.2-900 et seq.), §§ 38.2-1016.1 through 38.2-1023, 38.2-1057, § 38.2-1306.1,
 114 Article 2 (§ 38.2-1306.2 et seq.), § 38.2-1315.1, Articles 3.1 (§ 38.2-1316.1 et seq.), 4 (§ 38.2-1317 et
 115 seq.) and 5 (§ 38.2-1322 et seq.) of Chapter 13, Articles 1 (§ 38.2-1400 et seq.) and 2 (§ 38.2-1412 et
 116 seq.) of Chapter 14, §§ 38.2-3401, 38.2-3405, 38.2-3407.2 through 38.2-3407.5, 38.2-3407.6 and
 117 38.2-3407.6:1, 38.2-3407.9, 38.2-3407.9:01, and 38.2-3407.9:02, subdivisions 1, 2, and 3 of subsection F
 118 of § 38.2-3407.10, 38.2-3407.11, 38.2-3407.11:3, 38.2-3407.13, 38.2-3407.13:1, and 38.2-3407.14,
 119 38.2-3411.2, 38.2-3418.1, 38.2-3418.2, 38.2-3419.1, 38.2-3430.1 through 38.2-3437, 38.2-3500,
 120 subdivision 13 of § 38.2-3503, subdivision 8 of § 38.2-3504, §§ 38.2-3514.1, 38.2-3514.2, 38.2-3522.1

121 through 38.2-3523.4, 38.2-3525, 38.2-3540.1, 38.2-3542, 38.2-3543.2, Chapter 52 (§ 38.2-5200 et seq.),
122 Chapter 55 (§ 38.2-5500 et seq.), Chapter 58 (§ 38.2-5800 et seq.) and § 38.2-5903 shall be applicable to
123 any health maintenance organization granted a license under this chapter. This chapter shall not apply to
124 an insurer or health services plan licensed and regulated in conformance with the insurance laws or
125 Chapter 42 (§ 38.2-4200 et seq.) of this title except with respect to the activities of its health
126 maintenance organization.

127 C. Solicitation of enrollees by a licensed health maintenance organization or by its representatives
128 shall not be construed to violate any provisions of law relating to solicitation or advertising by health
129 professionals.

130 D. A licensed health maintenance organization shall not be deemed to be engaged in the unlawful
131 practice of medicine. All health care providers associated with a health maintenance organization shall
132 be subject to all provisions of law.

133 E. Notwithstanding the definition of an eligible employee as set forth in § 38.2-3431, a health
134 maintenance organization providing health care plans pursuant to § 38.2-3431 shall not be required to
135 offer coverage to or accept applications from an employee who does not reside within the health
136 maintenance organization's service area.

137 F. For purposes of applying this section, "insurer" when used in a section cited in subsections A and
138 B of this section shall be construed to mean and include "health maintenance organizations" unless the
139 section cited clearly applies to health maintenance organizations without such construction.

10103458D

SENATE BILL NO. 464

Offered January 13, 2010

Prefiled January 13, 2010

A BILL to amend and reenact § 38.2-4319 of the Code of Virginia and to amend the Code of Virginia by adding a section numbered 38.2-3418.16, relating to health insurance coverage for autism spectrum disorder.

Patrons—Howell, Herring, Marsden, Petersen, Ticer and Whipple; Delegates: Bulova, Herring, Kory, Plum, Rust, Scott, J.M., Surovell and Watts

Referred to Committee on Commerce and Labor

Be it enacted by the General Assembly of Virginia:

1. That § 38.2-4319 of the Code of Virginia is amended and reenacted and that the Code of Virginia is amended by adding a section numbered 38.2-3418.16 as follows:

§ 38.2-3418.16. Coverage for autism spectrum disorder.

A. Notwithstanding the provisions of § 38.2-3419, each insurer proposing to issue group accident and sickness insurance policies providing hospital, medical and surgical, or major medical coverage on an expense-incurred basis; each corporation providing group accident and sickness subscription contracts; and each health maintenance organization providing a health care plan for health care services shall, as provided in this section, provide coverage for the diagnosis of autism spectrum disorder and the treatment of autism spectrum disorder in individuals from the date of diagnosis until the individual completes nine years of age. If an individual who is being treated for autism spectrum disorder becomes ten years of age or older and continues to need treatment, this section does not preclude coverage of treatment and services. In addition to the requirements imposed on health insurance issuers by § 38.2-3436, an insurer shall not terminate coverage, or refuse to deliver, issue, amend, adjust, or renew coverage, to an individual solely because the individual is diagnosed with one of the autism spectrum disorders or has received treatment for autism spectrum disorder.

B. For purposes of this section:

"Applied behavior analysis" means the design, implementation, and evaluation of environmental modifications, using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct observation, measurement, and functional analysis of the relationship between environment and behavior.

"Autism spectrum disorder" means any pervasive developmental disorder, including (i) autistic disorder, (ii) Asperger's Syndrome, (iii) Rett syndrome, (iv) childhood disintegrative disorder, or (v) Pervasive Developmental Disorder - Not Otherwise Specified, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.

"Diagnosis of autism spectrum disorder" means medically necessary assessments, evaluations, or tests to diagnose whether an individual has an autism spectrum disorder.

"Habilitative or rehabilitative care" means professional, counseling, and guidance services and treatment programs, including applied behavior analysis, that are necessary to develop, maintain, or restore, to the maximum extent practicable, the functioning of an individual.

"Pharmacy care" means medications prescribed by a licensed physician and any health-related services deemed medically necessary to determine the need or effectiveness of the medications.

"Psychiatric care" means direct or consultative services provided by a psychiatrist licensed in the state in which the psychiatrist practices.

"Psychological care" means direct or consultative services provided by a psychologist licensed in the state in which the psychologist practices.

"Therapeutic care" means services provided by licensed or certified speech therapists, occupational therapists, physical therapists, or clinical social workers.

"Treatment for autism spectrum disorder" shall be identified in a treatment plan and includes the following care prescribed, provided, or ordered for an individual diagnosed with one of the autism spectrum disorders by a licensed physician or a licensed psychologist who determines the care to be medically necessary: (i) habilitative or rehabilitative care, (ii) pharmacy care, (iii) psychiatric care, (iv) psychological care, and (v) therapeutic care.

"Treatment plan" means a plan for the treatment of autism spectrum disorder developed by a licensed physician or a licensed psychologist pursuant to a comprehensive evaluation or reevaluation performed in a manner consistent with the most recent clinical report or recommendation of the American Academy of Pediatrics or the American Academy of Child and Adolescent Psychiatry.

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58 C. Except for inpatient services, if an individual is receiving treatment for an autism spectrum
59 disorder, an insurer, corporation, or health maintenance organization shall have the right to request a
60 review of that treatment not more than once every 12 months, unless the insurer, corporation, or health
61 maintenance organization and the individual's licensed physician or licensed psychologist agree that a
62 more frequent review is necessary. The cost of obtaining any review shall be covered under the policy,
63 contract, or plan.

64 D. Coverage under this section will not be subject to any visit limits, and shall neither be different
65 nor separate from coverage for any other illness, condition, or disorder for purposes of determining
66 deductibles, lifetime dollar limits, copayment and coinsurance factors, and benefit year maximum for
67 deductibles and copayment and coinsurance factors.

68 E. Nothing shall preclude the undertaking of usual and customary procedures to determine the
69 appropriateness of, and medical necessity for, treatment of autism spectrum disorder under this section,
70 provided that all such appropriateness and medical necessity determinations are made in the same
71 manner as those determinations are made for the treatment of any other illness, condition, or disorder
72 covered by such policy, contract, or plan.

73 F. The provisions of this section shall not apply to (i) short-term travel, accident only, limited, or
74 specified disease policies; (ii) short-term nonrenewable policies of not more than six months' duration;
75 (iii) policies, contracts, or plans issued in the individual market or small group markets to employers
76 with 50 or fewer employees, or (iv) policies or contracts designed for issuance to persons eligible for
77 coverage under Title XVIII of the Social Security Act, known as Medicare, or any other similar
78 coverage under state or federal governmental plans.

79 G. The requirements of this section shall apply to all insurance policies, subscription contracts, and
80 health care plans delivered, issued for delivery, reissued, or extended on or after January 1, 2011, and
81 to all such policies, contracts, or plans to which a term is changed or any premium adjustment is made
82 on or after such date.

83 H. Any coverage required pursuant to this section shall be in addition to the coverage required by
84 § 38.2-3418.5 and other provisions of law. This section shall not be construed as diminishing any
85 coverage required by § 38.2-3412.1:01. This section shall not be construed as affecting any obligation
86 to provide services to an individual under an individualized family service plan, an individualized
87 education program, or an individualized service plan.

88 I. Notwithstanding the provisions of § 2.2-2818.2, this section shall not apply to health coverage
89 offered to state employees pursuant to § 2.2-2818 until July 1, 2015.

90 § 38.2-4319. Statutory construction and relationship to other laws.

91 A. No provisions of this title except this chapter and, insofar as they are not inconsistent with this
92 chapter, §§ 38.2-100, 38.2-136, 38.2-200, 38.2-203, 38.2-209 through 38.2-213, 38.2-216, 38.2-218
93 through 38.2-225, 38.2-229, 38.2-232, 38.2-305, 38.2-316, 38.2-322, 38.2-400, 38.2-402 through
94 38.2-413, 38.2-500 through 38.2-515, 38.2-600 through 38.2-620, Chapter 9 (§ 38.2-900 et seq.),
95 §§ 38.2-1016.1 through 38.2-1023, 38.2-1057, Article 2 (§ 38.2-1306.2 et seq.), § 38.2-1306.1,
96 § 38.2-1315.1, Articles 3.1 (§ 38.2-1316.1 et seq.), 4 (§ 38.2-1317 et seq.) and 5 (§ 38.2-1322 et seq.) of
97 Chapter 13, Articles 1 (§ 38.2-1400 et seq.) and 2 (§ 38.2-1412 et seq.) of Chapter 14, §§ 38.2-1800
98 through 38.2-1836, 38.2-3401, 38.2-3405, 38.2-3405.1, 38.2-3407.2 through 38.2-3407.6:1, 38.2-3407.9
99 through 38.2-3407.16, 38.2-3411.2, 38.2-3411.3, 38.2-3411.4, 38.2-3412.1:01, 38.2-3414.1, 38.2-3418.1
100 through 38.2-3418.15 38.2-3418.16, 38.2-3419.1, 38.2-3430.1 through 38.2-3437, 38.2-3500, subdivision
101 13 of § 38.2-3503, subdivision 8 of § 38.2-3504, §§ 38.2-3514.1, 38.2-3514.2, 38.2-3522.1 through
102 38.2-3523.4, 38.2-3525, 38.2-3540.1, 38.2-3541.1, 38.2-3542, 38.2-3543.2, Article 5 (§ 38.2-3551 et
103 seq.) of Chapter 35, Chapter 52 (§ 38.2-5200 et seq.), Chapter 55 (§ 38.2-5500 et seq.), Chapter 58
104 (§ 38.2-5800 et seq.) and § 38.2-5903 of this title shall be applicable to any health maintenance
105 organization granted a license under this chapter. This chapter shall not apply to an insurer or health
106 services plan licensed and regulated in conformance with the insurance laws or Chapter 42 (§ 38.2-4200
107 et seq.) of this title except with respect to the activities of its health maintenance organization.

108 B. For plans administered by the Department of Medical Assistance Services that provide benefits
109 pursuant to Title XIX or Title XXI of the Social Security Act, as amended, no provisions of this title
110 except this chapter and, insofar as they are not inconsistent with this chapter, §§ 38.2-100, 38.2-136,
111 38.2-200, 38.2-203, 38.2-209 through 38.2-213, 38.2-216, 38.2-218 through 38.2-225, 38.2-229,
112 38.2-232, 38.2-322, 38.2-400, 38.2-402 through 38.2-413, 38.2-500 through 38.2-515, 38.2-600 through
113 38.2-620, Chapter 9 (§ 38.2-900 et seq.), §§ 38.2-1016.1 through 38.2-1023, 38.2-1057, § 38.2-1306.1,
114 Article 2 (§ 38.2-1306.2 et seq.), § 38.2-1315.1, Articles 3.1 (§ 38.2-1316.1 et seq.), 4 (§ 38.2-1317 et
115 seq.) and 5 (§ 38.2-1322 et seq.) of Chapter 13, Articles 1 (§ 38.2-1400 et seq.) and 2 (§ 38.2-1412 et
116 seq.) of Chapter 14, §§ 38.2-3401, 38.2-3405, 38.2-3407.2 through 38.2-3407.5, 38.2-3407.6 and
117 38.2-3407.6:1, 38.2-3407.9, 38.2-3407.9:01, and 38.2-3407.9:02, subdivisions 1, 2, and 3 of subsection F
118 of § 38.2-3407.10, 38.2-3407.11, 38.2-3407.11:3, 38.2-3407.13, 38.2-3407.13:1, and 38.2-3407.14,
119 38.2-3411.2, 38.2-3418.1, 38.2-3418.2, 38.2-3419.1, 38.2-3430.1 through 38.2-3437, 38.2-3500,

120 subdivision 13 of § 38.2-3503, subdivision 8 of § 38.2-3504, §§ 38.2-3514.1, 38.2-3514.2, 38.2-3522.1
121 through 38.2-3523.4, 38.2-3525, 38.2-3540.1, 38.2-3542, 38.2-3543.2, Chapter 52 (§ 38.2-5200 et seq.),
122 Chapter 55 (§ 38.2-5500 et seq.), Chapter 58 (§ 38.2-5800 et seq.) and § 38.2-5903 shall be applicable to
123 any health maintenance organization granted a license under this chapter. This chapter shall not apply to
124 an insurer or health services plan licensed and regulated in conformance with the insurance laws or
125 Chapter 42 (§ 38.2-4200 et seq.) of this title except with respect to the activities of its health
126 maintenance organization.

127 C. Solicitation of enrollees by a licensed health maintenance organization or by its representatives
128 shall not be construed to violate any provisions of law relating to solicitation or advertising by health
129 professionals.

130 D. A licensed health maintenance organization shall not be deemed to be engaged in the unlawful
131 practice of medicine. All health care providers associated with a health maintenance organization shall
132 be subject to all provisions of law.

133 E. Notwithstanding the definition of an eligible employee as set forth in § 38.2-3431, a health
134 maintenance organization providing health care plans pursuant to § 38.2-3431 shall not be required to
135 offer coverage to or accept applications from an employee who does not reside within the health
136 maintenance organization's service area.

137 F. For purposes of applying this section, "insurer" when used in a section cited in subsections A and
138 B of this section shall be construed to mean and include "health maintenance organizations" unless the
139 section cited clearly applies to health maintenance organizations without such construction.

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