



**SOUTH CAROLINA REVENUE AND FISCAL AFFAIRS OFFICE**  
**STATEMENT OF ESTIMATED FISCAL IMPACT**  
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Bill Number: S. 0135 Updated for revised agency response  
 Author: Cleary  
 Requestor: House Labor, Commerce, and Industry  
 Date: July 10, 2015  
 Subject: Ryan's Law  
 RFA Analyst(s): Jolliff, Fulmer, and Stein

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**Estimate of Fiscal Impact**

|                                  | <b>FY 2015-16</b> | <b>FY 2016-17</b> |
|----------------------------------|-------------------|-------------------|
| <b>State Expenditure</b>         |                   |                   |
| General Fund                     | See Below         | N/A               |
| Other and Federal                | See Below         | N/A               |
| Full-Time Equivalent Position(s) | 0.00              | 0.00              |
| <b>State Revenue</b>             |                   |                   |
| General Fund                     | See Below         | \$0               |
| Other and Federal                | N/A               | N/A               |
| <b>Local Expenditure</b>         | N/A               | N/A               |
| <b>Local Revenue</b>             | N/A               | N/A               |

See also attached actuarial report produced for the Department of Insurance pursuant to §2-7-73.

**Fiscal Impact Summary**

The fiscal impact on State expenditures is primarily dependent upon legal issues involving provisions of the Protection and Affordable Care Act of 2010 (ACA). It may also be affected by many uncertainties in service utilization, eligibility, and administrative issues. If it is determined that the State is responsible for defraying the cost of the increased benefits, the cost is estimated to be \$1,678,131 for 2016. Legislative direction, however, for the administration of these payments would also be required.

Additionally, the impact on General Fund insurance premium tax revenue depends upon resolution of the legal issues described below.

**Explanation of Fiscal Impact**

**State Expenditure**

This bill amends Section 38-71-280 relating to health insurance coverage for autism spectrum disorders to revise the definition of covered disorders and to amend the insurance coverage requirements by deleting existing eligibility limitations. Under the ACA, the State may be required to pay the cost of private insurers for mandated additional benefits. This determination rests on whether the services required by the bill are considered a new additional benefit or an extension of current benefits. At this time, the answer to these legal questions is unclear. There is no history of a state triggering the reimbursements or precedent for state payments for expanded coverage requirements, and the responsibilities of a state with regard to this component

of the ACA have not been established. If State liability is established, then the estimated costs are described below. If litigation is required to resolve this issue, then additional expenses may be incurred.

**Public Employee Benefit Authority (PEBA).** PEBA indicates there would be no expenditure impact on the General Fund, Federal Funds, or Other Funds. According to PEBA, limits regarding coverage related to age and dollar amounts in the State Health Plan for autism spectrum disorders were removed for plan year 2015. Therefore, no additional impact is expected.

**Department of Insurance.** The bill would amend the coverage requirements for autism spectrum disorders. The department retained a consulting firm, L&E Actuaries & Consultants, to evaluate the potential cost of expanding this coverage. (The actuarial report assumes that the State will be required to cover the additional cost for these expanded benefits for all individuals in a QHP. Any differences in the ultimate determination of eligible individuals may significantly impact the estimated expenditures.) The actuarial report provides a broad range for the expenditure estimate because of the uncertainty surrounding the assumptions and data reviewed and utilized. Based on the limited data available and under the assumptions outlined in the actuarial report, the actuarial estimate of the cost is \$1,678,131, including projected administrative costs of \$179,800 from the assumption that administrative costs account for fifteen percent of benefits. However, the potential range of the impact on expenditures for the State may be as high as \$7.25 million for calendar year 2016 given the inherent variability in the underlying assumptions on disease prevalence, service utilization, and eligibility. The referenced actuarial report is attached.

Additionally, if the State is responsible for the cost of these benefits, legislative direction is needed to provide the department with instruction on the method of reimbursement that is to be used and the appropriations for the reimbursements. The Department of Insurance would require additional authorization to establish reimbursement procedures for the expanded coverage and additional appropriations for administration of the program. The department would need to establish a procedure for identifying individuals eligible for reimbursement and subsequently reimbursing the insured or the insurer for the cost of the expanded coverage.

### **State Revenue**

Again, the impact upon State revenue will depend upon the legal conclusion as to whether this law expands current benefits or mandates a new benefit. If this law is an expansion of current benefits and the State is not required to defray the cost, any increase in premiums for private insurers as a result of the law would increase insurance premium tax to offset the estimated cost of \$1,678,131 for 2016. These increased premiums would be subject to a 1.25 percent premium tax credited to the General Fund. The additional benefits times the premium tax would generate \$20,977 in General Fund insurance premium tax over a full year. Since premium taxes are reported quarterly beginning in March for the previous calendar year, six months of premium taxes would be collected in FY 2016-17 and the remaining six months would be remitted to the General Fund in FY 2017-18 for calendar year 2016 benefits.

If the law is determined to be a mandated new benefit and the State is determined to be liable for the cost, then the premiums would not increase and there would be no increase in General Fund revenue.

**Local Expenditure**

N/A

**Local Revenue**

N/A



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Frank A. Rainwater, Executive Director

ACTUARIAL REPORT ON



COST ESTIMATE OF SOUTH CAROLINA BILL S.135  
TO AMEND HEALTH INSURANCE COVERAGE FOR  
AUTISM SPECTRUM DISORDER

SOUTH CAROLINA DEPARTMENT OF INSURANCE

June 18, 2015

PRESENTED BY: DAVID M. DILLON, FSA, MAAA  
SERGEI V. MORDOVIN, ASA, MAAA

LEWIS & ELLIS, INC.

*Cost Estimate to Amend Health Insurance Coverage for Autism Spectrum Disorder*

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## Executive Summary

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Lewis & Ellis, Inc. (L&E) was retained by the South Carolina Department of Insurance (Department) to provide a fiscal impact statement regarding Senate Bill 135 (S.135) which would amend §38-71-280 of the South Carolina Code of Laws.

The key amendment included in S.135 would be to eliminate the exclusion of Autism Spectrum Disorder (ASD) treatments in the individual and small group health insurance markets.

Additionally, S.135 would eliminate the following restrictions currently included in the law:

- Autism diagnosis must occur by age 8;
- Coverage ends at age 16;
- An indexed annual benefit maximum on behavioral health treatment (currently \$54,200 for calendar year 2015).

L&E's conclusions were reached by developing an independent range of cost estimates and by reviewing similar studies of autism spectrum disorders done on the behalf of other states.

### *CONCLUSIONS*

Based on an independent analysis of South Carolina's State Health Plan (SHP) autism claims experience, L&E developed a best estimate for the cost to the state of South Carolina for including autism as a mandated benefit in the individual and small group markets.

This cost is expected to be approximately \$1.68 million for calendar year 2016. On a per member per month (PMPM) basis, the cost is expected to be \$0.51 pmpm for each person who purchases a Qualified Health Plan (QHP).

Due to the inherent variability in the underlying assumptions (e.g. the autism prevalence rate in the State Health Plan being materially different than other state estimates), L&E developed a range of possible outcomes based on a statistical simulation.

With a 95% statistical confidence, L&E estimates that the costs will be between \$1.11 and \$7.25 million for calendar year 2016 (Please see page 20 for further information).

On a PMPM basis, the cost is expected to be between \$0.35 and \$2.20 pmpm for each person who purchases a QHP (Please see page 21 for further information).

After 2016, the State's costs would be expected to increase due to increased enrollment in QHPs and increased per member costs as a result of medical cost trend, which is typically around 5.5% annually.

## Purpose & Scope

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L&E was retained by the South Carolina Department of Insurance to provide a fiscal impact statement regarding S.135 which would amend §38-71-280. Copies of S. 135 and §38-71-280 are included in the Appendices of this report.

S. 135 amendments to §38-71-280 include:

- The elimination of the exclusion of Autism Spectrum Disorder treatments in the individual and small group health insurance markets;
- Autism diagnosis does not have to occur by age 8;
- ASD coverage no longer ends at age 16;
- The elimination of the annual maximum.

Section 1311(d)(3) of the Patient Protection and Affordable Care Act of 2010 (ACA) directs states to defray costs if they require QHPs to offer benefits in addition to the ten essential health benefits (EHBs) that the ACA requires for small group and individual policies. Since the South Carolina EHB benchmark plan did not include autism services and since the State declined to define habilitative services to include autism benefits, the State would have to defray autism costs that are subject to S. 135<sup>1</sup>.

Pursuant to §2-7-73 of the S.C. Code of Law, L&E was asked to assess the following regarding the financial impact of S. 135:

- To what extent does the coverage increase or decrease the cost of treatment or services;
- To what extent does the coverage increase or decrease the use of treatment or service;
- To what extent does the mandated treatment or service substitute for more expensive treatment or service;
- To what extent does the coverage increase or decrease the administrative expenses of insurance companies and the premium and administrative expenses of policyholders; and
- What is the impact of this coverage on the total cost of health care.

## Limitations

This report is limited to providing the state of South Carolina (State) financial cost estimates associated with S.135. This report is not appropriate for any other purpose.

While L&E believes that the projections developed in this report provide a reasonable basis for the expected costs for persons that would now have ASD services provided through their health

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<sup>1</sup> <https://www.cms.gov/CCIIO/Resources/Data-Resources/Downloads/Updated-South-Carolina-Benchmark-Summary.pdf>



insurance policy, there is much uncertainty surrounding the assumptions and data reviewed and utilized for this report. The actuarial guidance and discussion in this report should not be considered predictions of what will occur. The guidance provided in this report is based on evaluating a specific set of assumptions and should be used to evaluate a range of potential outcomes. Actual experience will deviate from the projections evaluated.

Due to expected immateriality, L&E did not assess the impact of the autism diagnosis occurring after age 8.

The authors of this report are members of the American Academy of Actuaries and meet the qualification standards for performing this analysis. The guidance and analysis expressed in this report are those of the authors only and do not necessarily represent the opinions of other L&E consultants.

The authors of this report are not attorneys and are not qualified to give legal advice. Users of this report should consult legal counsel for interpreting proposed legislation, state laws, and other issues related to S. 135.

### Limits on Distribution

The authors of this report are aware that it may be distributed to third parties; however, any users of this report must possess a certain level of expertise in health insurance, healthcare, or actuarial science so as not to misinterpret the data presented. Any distribution of this report must be made in its entirety. In addition, any third party with access to this report acknowledges, as a condition of receipt, that L&E makes no representations or warranties as to the accuracy or completeness of the material. Any third party with access to these materials cannot bring suit, claim, or action against L&E, under any theory of law, related in any way to this material.

### Reliances and Confidentiality

In performing this study, L&E relied on data and information from many sources, including but not limited to the Department, BlueCross BlueShield of South Carolina (BCBS), the South Carolina State Health Plan (SHP), and OliverWyman (OW). L&E did not audit the data sources for accuracy, although the data were reviewed for reasonableness. If the data or information provided was inaccurate or incomplete, then any resultant projections or guidance could also be inaccurate or incomplete.

L&E recognizes that in the performance of the work, L&E acquired or had access to records and information considered confidential by the above parties. L&E took steps to comply with confidentiality and privacy issues.



## Assumptions

There are four key underlying variables in evaluating the potential fiscal impact of S.135. These four variables are:

- The cost per each ASD service provided;
- The number of ASD services provided;
- The number of persons that the coverage applies to;
- The State's costs administrating the ASD mandate.

### Cost per Service

#### Children

In South Carolina, the State Health Plan covers ASD subject to §38-71-280. Since there is very limited South Carolina specific data available, L&E utilized the SHP claims and membership data as well as industry data to develop an estimated ASD cost based on what L&E believes are reasonable data and assumptions.

Actual costs will depend on a large number of factors including, but not limited to, the type and level of benefits, the population served, provider availability, and provider cost.

#### *State Health Plan Cost Data*

BlueCross BlueShield of South Carolina is currently the administrator of the State Health Plan for South Carolina employees' medical benefits. BCBS provided cost and membership data for the SHP's autism spectrum disorder benefits for calendar years 2012, 2013, 2014, and through May of 2015.

L&E determined that the 2015 data was not statistically credible; therefore, it was not used in the analysis.

| Year | Aggregated ASD Cost | Covered ASD Children | Cost per Enrolled Child |
|------|---------------------|----------------------|-------------------------|
| 2012 | \$1,848,140         | 120                  | \$15,401                |
| 2013 | \$2,065,777         | 139                  | \$14,862                |
| 2014 | \$2,319,109         | 174                  | \$13,328                |

L&E made several adjustments to the above data to comply with S. 135:

- Claims trend was added to project the child costs to calendar year 2016;
- An adjustment for the removal of the annual benefit limit;
- The three years of data was averaged.

For the claims trend adjustment, L&E utilized information from the Towers Watson 2014 Medical Rate Manual. In this manual, the annualized claims trend from 2006 to 2014 is between 5.4% and 5.6% depending on the location within South Carolina. L&E assumed an annualized trend amount of 5.5% per year.

For the removal of the annual benefit maximum, L&E reviewed the analysis performed by the Wakely Consulting Group (Wakely) on behalf of the state of Hawaii. Based on Wakely's analysis, L&E increased the expected cost per child by 15%.<sup>2</sup>

Based on the above adjustments to the SHP claims experience, L&E's 2016 cost estimate for a child using ASD services in South Carolina is approximately \$20,000.

#### *Comparative Study Cost Data*

While it is useful to utilize the state-specific claims experience when available, due to the statistically small nature of the SHP data, L&E also reviewed the expected costs of providing ASD services in other states.

From 2009 – 2012, the actuarial firm OliverWyman (OW) conducted autism mandate analysis for 24 states<sup>3</sup>. L&E reviewed these similar studies to assist in the development of a range of costs around the independent estimate.

Generally speaking, the cost component of the other state studies were based on multiple scenarios to develop a range of estimated costs. Based on these reports, the average annual cost per child was approximately \$46,000 per year.

Regarding the OW reports, it should be noted that:

- Annual limitations were included for some states;
- The projection years were between 2009 and 2012.

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<sup>2</sup> <http://cca.hawaii.gov/ins/files/2015/01/Final-Autism-Actuarial-Analysis-Report.pdf>

<sup>3</sup> <https://www.autismspeaks.org/node/214706>

Therefore, L&E made the following adjustments:

- Claims trend of 5.5% was added to project the child costs to calendar year 2016;
- An adjustment of 15% to remove the annual benefit limit.

Note that for both adjustments, L&E utilized the same factors that were applied to the SHP data. Based on the above adjustments to the OW cost data, L&E estimated that the 2016 cost for a child could be as high as approximately \$68,000.

### Adults

There is very little publicly available information concerning adult autism costs; however, one study, *The Lifetime Distribution of the Incremental Societal Costs of Autism* by Dr. Michael Ganz<sup>4</sup>, did address adult costs.

Based on the analysis performed in this study, L&E assumed that the average cost for adults is 10% of child costs.

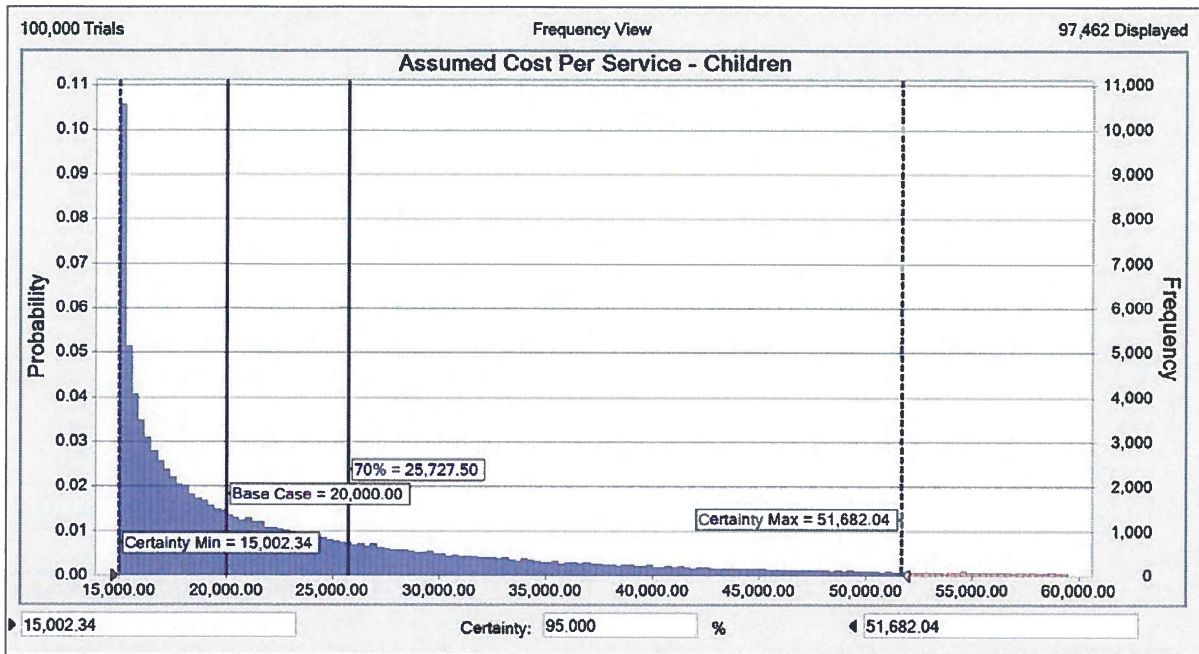
### Cost per Service Modeling Assumptions

Based on the adjusted SHP data, L&E assumed a base case of the 2016 ASD child cost to be \$20,000. Based on the information provided in the OW reports, L&E estimated that the average cost could range as high as \$68,000.

The following graph illustrates the range of child costs assumed in the modeling.

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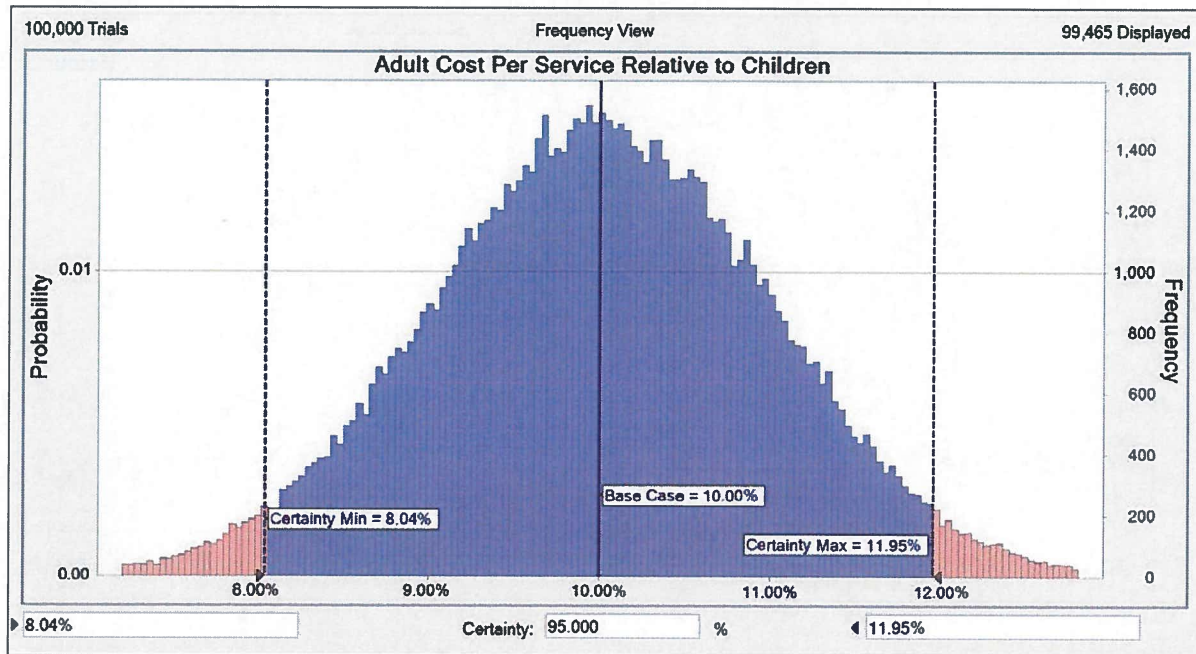
<sup>4</sup> <http://www.flour.com/sitedocuments/incrementalsocietalcostsautism.pdf>



A few notes about the above graph include:

- 95% of the time the cost estimates are approximately between \$15,000 and \$52,000;
- The range is skewed towards lower values:
  - 70% of the estimates are approximately less than \$26,000; while
  - Costs larger than \$26,000 only account for 30% of the estimates.

For adults, L&E assumed that the average cost would be 10% of the children costs. Regarding the range of costs, 95% of the values are expected to be between 8% and 12%.



## Number of ASD Services

### Children

Similar to cost data, there is very little South Carolina specific data available other than the SHP dataset. Therefore, L&E utilized the SHP data available as well as industry data to develop an estimate of the use of ASD services.

The actual use of ASD services will depend on a large number of factors including, but not limited to, the type and level of benefits, the population served, and provider availability.

### State Health Plan Cost Data

The following table summarizes the percent of SHP children that utilized ASD services:

| Year | Estimated SHP Members < Age 14 | # of Children with ASD Services | % of Children with ASD Services | Treated Prevalence Rate (Equal to 1 ÷ %) |
|------|--------------------------------|---------------------------------|---------------------------------|--|
| 2012 | 59,331                         | 120                             | 0.20%                           | 1 in 494                                 |
| 2013 | 60,585                         | 139                             | 0.23%                           | 1 in 436                                 |
| 2014 | 61,668                         | 174                             | 0.28%                           | 1 in 354                                 |



Due to the increasing prevalence rate, L&E does not believe that an average prevalence rate is appropriate for the base case assumption. Additionally, the SHP data has to be adjusted to account for the fact that the termination age of 16 has been removed. L&E believes that a prevalence assumption of 1 in 375 is a reasonable assumption and accounts for both issues.

*Comparative Study Cost Data*

The following table summarizes the treated prevalence rate for children assumed in the OW reports done on behalf of other states:

| States                         | Treated Prevalence Rate |
|--------------------------------|-------------------------|
| 20 States including:<br>NC, VA | 1 in 150                |
| MO, GA                         | 1 in 158                |
| AR                             | 1 in 176                |
| MT                             | 1 in 200                |

Based on the prevalence of autism in geographically similar states, L&E estimated that the average prevalence rate in South Carolina could be as low as 1 in 150.

**Adults**

There is very little publicly available information concerning the number of ASD services utilized by adults; however, in 2009 England's National Health Service (NHS) released the first study of autism in the general adult population. The findings estimated that approximately 1 in 100 adults had autism<sup>5</sup>.

To modify this population-based prevalence rate to a treated-based prevalence rate, L&E made two adjustments. The first adjustment was a dampening factor to account for adults with a previously documented ASD classification. L&E applied a dampening factor 79%<sup>6</sup>.

The second adjustment was a utilization adjustment to account for the percentage of adults diagnosed with an ASD who will actually seek ASD services. Based on analysis performed by the Tennessee General Assembly Fiscal Review Committee, L&E assumed that 1% of adults would utilize ASD services if diagnosed.

After applying these adjustments, L&E assumed an adult treated prevalence rate of 1 in 12,500.

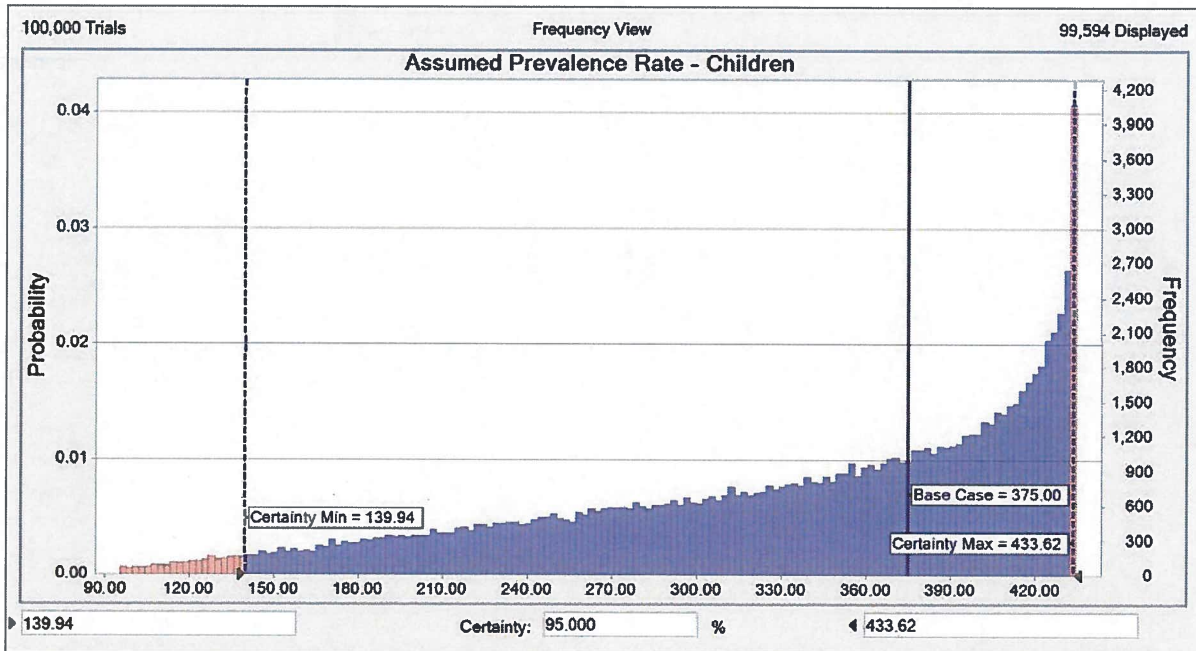
<sup>5</sup> <http://content.time.com/time/health/article/0,8599,1927415,00.html?xid=rss-health>  
<sup>6</sup> <http://cca.hawaii.gov/ins/files/2015/01/Final-Autism-Actuarial-Analysis-Report.pdf>



### Number of ASD Services Modeling Assumptions

Based on the adjusted SHP data, L&E assumed a base case prevalence rate for children to be 1 in 375. Based on the prevalence of autism in geographically similar states, L&E estimated that the prevalence rate could be significantly lower.

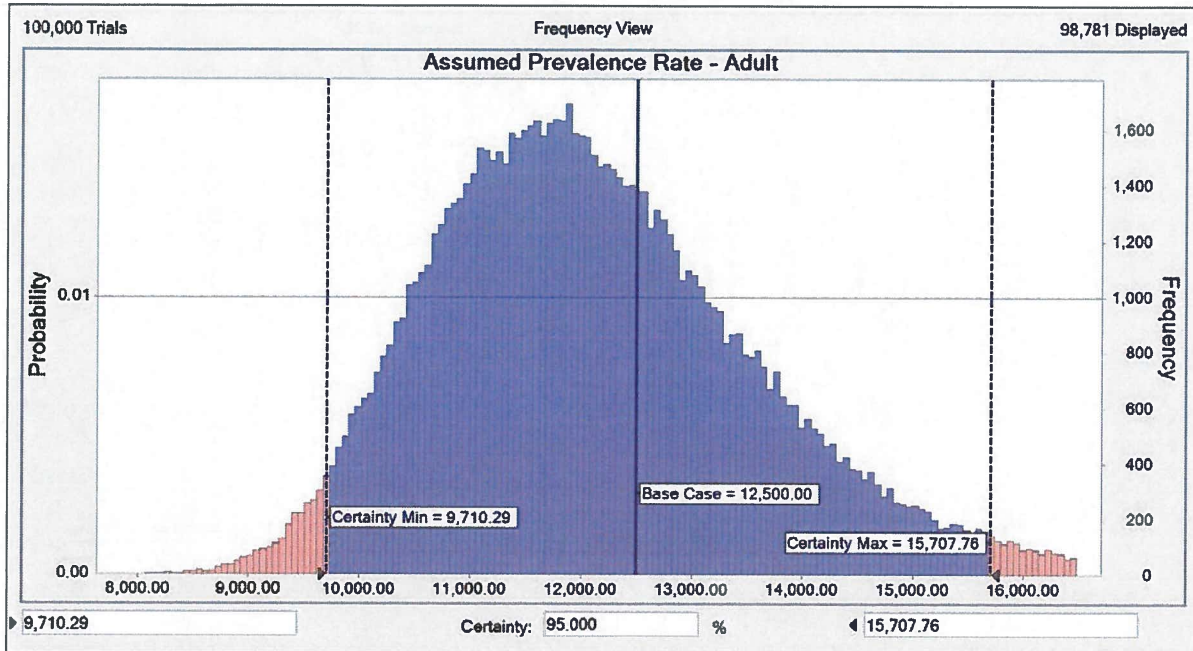
The following graph illustrates the range of autism prevalence for children assumed in the modeling.



A few notes about the above graph include:

- 95% of the prevalence rates are assumed to be approximately between 1 in 140 and 1 in 434;
- The range is skewed towards lower prevalence rates:
  - Approximately 60% of the estimates are expected to be less than the base case of 1 in 375 while only 40% of the values are expected to be larger.

For adults, L&E assumed that the average prevalence rate would be 1 in 12,500. Regarding the range of adult prevalence rates, 95% of the values are expected to be approximately between 1 in 9,700 and 1 in 15,700.



## Covered Persons

### Total QHP Enrollment

Per section 1311(d) (3) of the Affordable Care Act, as implemented by 45 CFR 155.170, if a state requires a Qualified Health Plan to cover additional benefits beyond the EHBs, the state must defray the cost. The definition of QHP is established by section 1301(a) of the Affordable Care Act and implemented in 45 CFR 155.20.

This definition requires that the QHP have in effect a certification issued or recognized by each Exchange through which such plan is certified. The requirement to defray the cost of additional benefits applies to all QHPs, including QHPs offered outside of the Exchange.<sup>7</sup>

Based on the above guidance, L&E assumed that South Carolina would be responsible for ASD costs associated with any insurance coverage certified as QHP, regardless of whether the coverage is sold on the Exchange or off the Exchange.

The Department provided L&E the results of departmental data surveys performed monthly since the inception of the Exchange. These surveys include issuer reported enrollment information.

<sup>7</sup> [http://www.doi.nebraska.gov/aca/companies/ffm/PM\\_OHP\\_FAQ10\\_050213.pdf](http://www.doi.nebraska.gov/aca/companies/ffm/PM_OHP_FAQ10_050213.pdf)

To estimate the growth in QHP enrollment from 2015 to 2016, L&E reviewed:

- The actual South Carolina QHP annualized growth rate from May 2014 to May 2015;
- The expected national Exchange annualized growth rate from 2014 to 2015<sup>8</sup>;
- The expected national Exchange annualized growth rate from 2015 to 2016;

| Growth Rate             |      |
|-------------------------|------|
| SC May 2014 to May 2015 | 77%  |
| National 2014 to 2015   | 117% |
| National 2015 to 2016   | 69%  |

Based on National expectations, the growth in the third year of the Exchanges is approximately 60% of the second year growth rate (69% / 117% = 59.3%).

L&E assumed South Carolina’s third year growth rate to be 45% which is 60% of the second year value of 77%.

Based on that information, the number of persons covered by QHPs in 2016 is expected to be:

| Market       | Actual 2015 QHP Membership | Projected 2016 QHP Membership | Assumed Growth Rate |
|--------------|----------------------------|-------------------------------|---------------------|
| Individual   | 188,187                    | 254,791                       | 35%                 |
| Small Group  | 469                        | 18,760                        | 3900%               |
| <b>Total</b> | 188,656                    | 273,551                       | 45%                 |

### Percentage of Children and Adults

To estimate the percent of the projected population that were adults versus children, L&E began by reviewing the Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE) 2015 March Open Enrollment report.<sup>9</sup> As of this report date, 7% of the enrollees in the South Carolina Exchange were under age 18.

The State Health Plan data indicated that approximately 14% of the covered population was under age 15 and approximately 20% of the covered population was under age 20. Therefore, the two datasets have dramatically different percentages of children.

While reviewing the ASPE report, L&E noted that 88% of all Exchange enrollees were low income persons who received Advance Premium Tax Credits (APTC). Children of adults who received APTC typically have other health coverage options, e.g. Medicaid. This appears to be the reason

<sup>8</sup> [http://www.cbo.gov/sites/default/files/45010-Outlook2014\\_Feb\\_0.pdf](http://www.cbo.gov/sites/default/files/45010-Outlook2014_Feb_0.pdf), page 108

<sup>9</sup> [http://aspe.hhs.gov/health/reports/2015/MarketPlaceEnrollment/Mar2015/ib\\_2015mar\\_enrollment.pdf](http://aspe.hhs.gov/health/reports/2015/MarketPlaceEnrollment/Mar2015/ib_2015mar_enrollment.pdf)

why the current Exchange enrollment has a lower percentage of children versus the State Health Plan.

Since Gold plans are not materially impacted by APTCs, L&E also reviewed the percentage of children enrolled in a Gold plan based on data available from the 2014 ASPE report<sup>10</sup>. This percentage was 14%.

L&E was also given access to the demographic information provided to the Department by issuers in the 2016 rate filings. Based on a review of the largest carriers' data, approximately 10% of the projected 2016 population were expected to be less than age 18.

L&E assumed that the portion of the projected enrollment applicable to children is 10%. L&E believes this is a reasonable assumption since it is consistent with the information provided by the health insurance issuers.

| <b>Age Group</b> | <b>Projected Total<br/>2016 Membership</b> | <b>Assumed % of<br/>Membership</b> |
|------------------|--|------------------------------------|
| <b>&lt;18</b>    | 27,355                                     | 10%                                |
| <b>18-64</b>     | <u>246,196</u>                             | <u>90%</u>                         |
| <b>Total</b>     | 273,551                                    | 100%                               |

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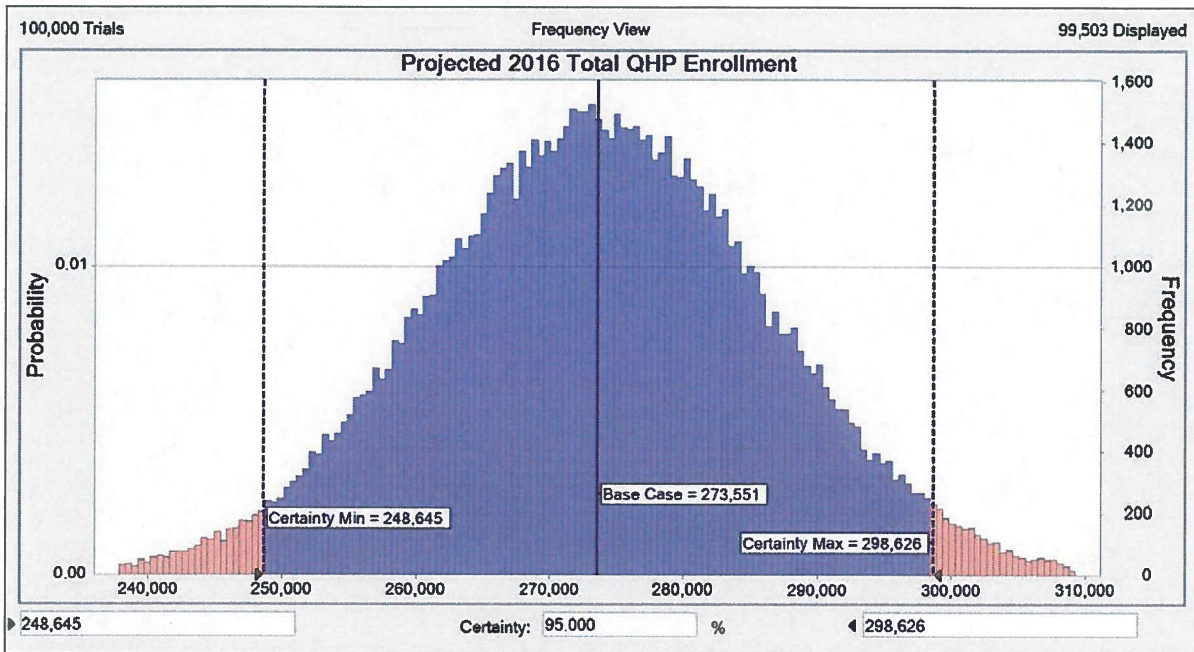
<sup>10</sup> [aspe.hhs.gov/.../2014/MarketPlaceEnrollment/Apr2014/excel/workbook](http://aspe.hhs.gov/.../2014/MarketPlaceEnrollment/Apr2014/excel/workbook)



## Covered Persons Modeling Assumptions

### Total QHP Enrollment

L&E used the issuer's projected total QHP enrollment of approximately 274,000 as the base case. L&E determined that a reasonable range of 2016 membership would be between 10% lower to 10% higher than the base case.



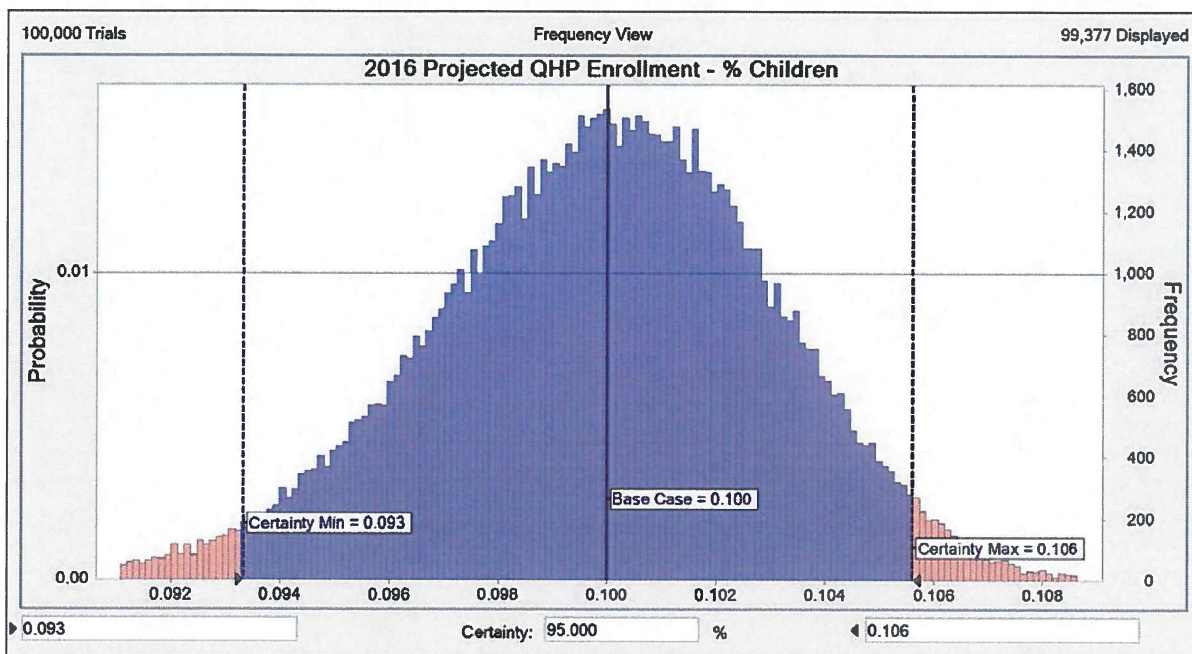
A few notes about the above graph include:

- For 95% of the scenarios, the projected enrollment is expected to be approximately between 250,000 and 300,000.

### Percentage of Children and Adults

For the base case, L&E assumed that 10% of the QHP enrollees were under age 18 while 90% were aged 18 to 64. This assumption was consistent with health insurance issuers' assumptions.

Regarding the range of the children percentage, 95% of the scenarios are expected to be approximately between 9.5% and 10.5%.



### Administrative Costs

Pursuant to 45 CFR 144.170, a state must make payments to defray the cost of additional required benefits that are in excess of EHBs. These payments can be made either:

- To an enrollee; or
- Directly to the QHP issuer on behalf of the enrollee.

As a result, there will need to be a process established and maintained that allows South Carolina to administer the autism mandate program. To estimate the costs of administering this program, L&E reviewed the administrative costs of the health insurance issuers selling individual and small group coverage.

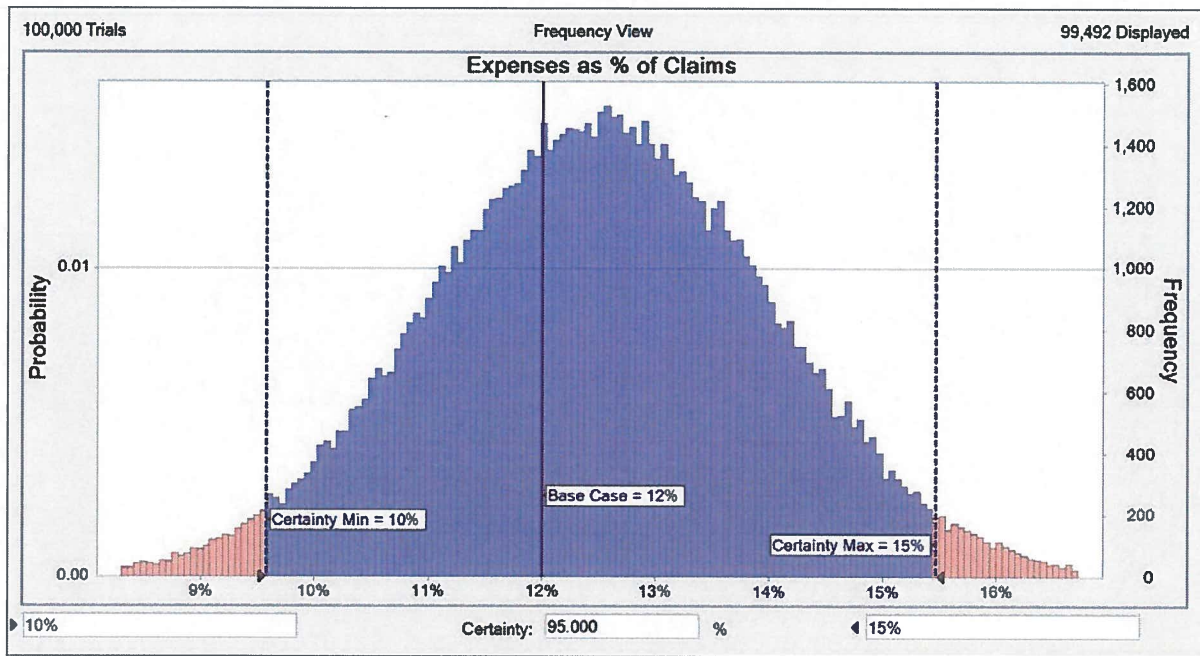
In the individual and small group markets, medical claim costs typically account for 75 to 85% of premiums. The remaining 15 to 25% of premiums are available for retention items such as administrative costs, taxes, fees, commissions, and profit.

By using the 2016 Unified Rate Review Templates (URRTs) submitted by health issuers to the Department, L&E determined that the average administrative expense load (excluding the



retention items not related to administration) assumed by health insurance issuers was approximately 15% of premium. By applying an 80% loss ratio adjustment factor, L&E assumed that expenses would be equal to 12% of claims.

For the range of possible outcomes, 95% of the scenarios project the expense assumption to be between 10% and 15%.



## Results

Based on an independent analysis of the State Health Plan autism claims experience and membership information, L&E developed a best estimate for the cost to the state of South Carolina for including autism as a mandated benefit in the individual and small group markets for 2016.

After 2016, the State's costs would be expected to increase due to increased Exchange/QHP enrollment and increased per member costs as a result of medical cost trend, which is typically around 5.5% annually.

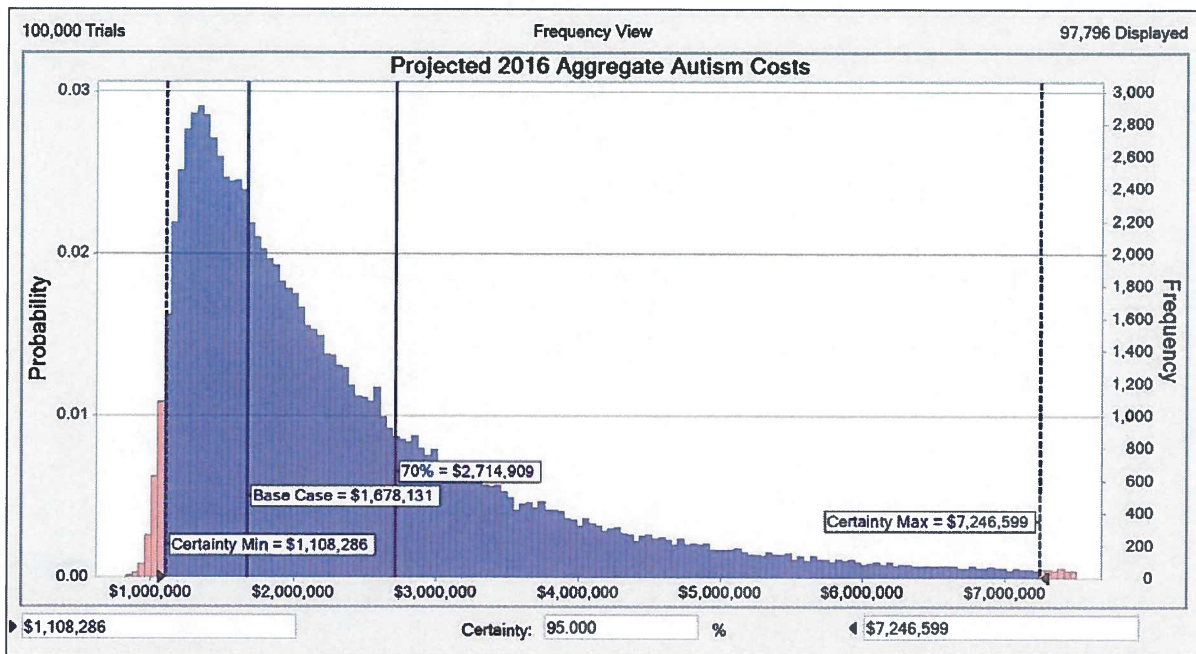
### Base Case

|  | 2016               |
|--|--------------------|
| QHP enrollees under age 18               | 27,355             |
| ASD frequency of services                | 0.267%             |
| Annual cost for users of ASD services    | <u>\$20,000</u>    |
| Cost for enrollees under age 18          | \$1,458,940        |
| QHP Enrollees between ages 18 and 64     | 246,196            |
| ASD Frequency of Services                | 0.008%             |
| Annual cost for users of ASD services    | <u>\$2,000</u>     |
| Cost for enrollees between 18 and 64     | \$39,391           |
| Total Projected 2016 Medical Cost        | \$1,498,331        |
| Total Projected 2016 Administrative Cost | <u>\$179,800</u>   |
| <b>Total Projected 2016 Cost</b>         | <b>\$1,678,131</b> |
| <b>Projected Cost on PMPM Basis</b>      | <b>\$0.51</b>      |

### Range of Results

In addition to developing a best estimate, L&E developed a range of possible outcomes by creating a stochastic simulation of 100,000 scenarios. Due to the inherent variability in the underlying assumptions (e.g. the autism prevalence rate in the State Health Plan being materially different than other state estimates), a range of outcomes will allow South Carolina to view the range of likely results and assess the risks of potentially higher autism mandate costs.

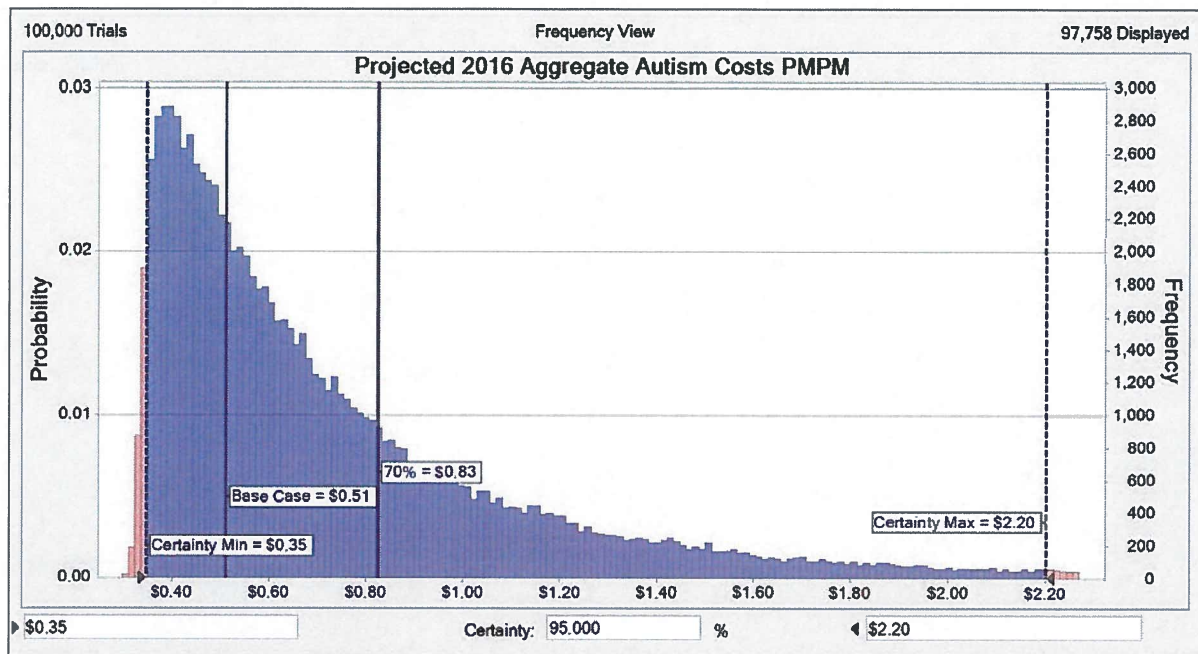
The following graph illustrates the range of possible 2016 aggregate costs based on the inherent variability of the underlying assumptions.



A few notes about the projected 2016 autism costs:

- There is a 95% likelihood that the autism costs for 2016 will be approximately between \$1.11 million and \$7.25 million;
- The range is skewed towards the lower cost estimates:
  - Approximately 70% of the estimates are lower than \$2.71 million; while
  - The range of costs higher than \$2.71 million only accounts for 30% of the cost estimates.

The following graph illustrates the range of possible 2016 aggregate costs on a PMPM basis.



A few notes about the projected pmpm 2016 autism costs:

- There is a 95% likelihood that the pmpm autism costs for 2016 will be between \$0.35 pmpm and \$2.20 pmpm;
- The range is skewed towards the lower pmpm estimates:
  - 70% of the estimates are lower than \$0.83 pmpm; while
  - Pmpm estimates above \$0.83 account for only 30% of the pmpm estimates.

## §2-7-73 Fiscal Impact Assessment

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Pursuant to §2-7-73 of the South Carolina Code of Law, L&E was asked to assess the following regarding the financial impact of S. 135:

- To what extent does the coverage increase or decrease the cost of treatment or services;
- To what extent does the coverage increase or decrease the use of treatment or service;
- To what extent does the mandated treatment or service substitute for more expensive treatment or service;
- To what extent does the coverage increase or decrease the administrative expenses of insurance companies and the premium and administrative expenses of policyholders; and
- What is the impact of this coverage on the total cost of health care.

In 2010, the state of Missouri passed a law that mandated health insurance coverage for medically necessary treatment of autism spectrum disorders (ASDs). All group policies issued or renewed after January 1, 2011 were required to extend ASD coverage to all insureds. All policies issued in the individual market were required to offer such coverage as an optional benefit for additional premium.

Coverage for ASD treatment significantly expanded in the individual market in 2014 as a result of the ACA. Due to the ACA, all non-grandfathered plans were required to provide coverage for EHBs. Since the Missouri small group market already included autism in benefit packages, coverage for autism treatment in the individual market was significantly expanded to match the benefits offered in the small group market.

Missouri's state law also directed the Department of Insurance, Financial Institutions and Professional Registration (DIFP) to annually assess the impact of the mandate on the health insurance market. Due to the similar nature of the autism mandate enacted by Missouri and due to the lack of other fiscal impact analyses, the data and information collected in Missouri's fourth annual report<sup>11</sup> was used by L&E to assess the potential fiscal impact of S. 135 for South Carolina as required by §2-7-73.

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<sup>11</sup> <http://insurance.mo.gov/consumers/autismFAQ/documents/2015AutismReport.pdf>



*To what extent does the coverage increase or decrease the cost of treatment or services;*

The following table summarizes the fiscal impact of the autism mandate in Missouri:

|                                  | 2012        | 2013        | 2014        |
|----------------------------------|-------------|-------------|-------------|
| <b>Total Persons Covered</b>     | 17,149,845  | 17,324,161  | 19,485,888  |
| <b>ASD Frequency of Services</b> | 0.182%      | 0.232%      | 0.296%      |
| <b>Annual cost Per Service</b>   | \$209       | \$206       | \$170       |
| <b>Total Cost</b>                | \$6,550,555 | \$8,289,611 | \$9,801,402 |
| <b>PMPM Cost</b>                 | \$0.38      | \$0.48      | \$0.50      |

The cost per service slightly decreased from 2012 to 2014. Based on the experience in Missouri, it appears that the passage of an autism mandate may decrease the cost of treatment; however, South Carolina could be impacted differently as a result of multiple variables, such as provider availability and provider cost.

*To what extent does the coverage increase or decrease the use of treatment or service;*

From 2012 to 2014, the frequency of the covered population using ASD services increased from 0.182% to 0.296%, which is an annual increase of approximately 28%.

Therefore, it appears that the passage of an autism mandate will increase the use of treatment.

*To what extent does the mandated treatment or service substitute for more expensive treatment or service;*

There does not appear any information available to assess whether the autism mandate would substitute for more expensive treatments. Therefore, an exact impact cannot be determined.

*To what extent does the coverage increase or decrease the administrative expenses of insurance companies and the premium and administrative expenses of policyholders*

Since Section 1311(d) (3) of the ACA directs states to defray costs if they require QHPs to offer benefits in addition to the EHBs, it is expected that the impact to the administrative expenses of insurance companies will be negligible.

Additionally, since the ACA requires the state to defray the cost of the mandate by reimbursing the policyholder directly or indirectly for the excess cost of the mandate, the impact to each policyholder's premium rates is expected to be negligible or non-existent.



*What is the impact of this coverage on the total cost of health care.*

As outlined previously in this report, the impact of the autism mandate is expected to cost the state of South Carolina between \$1.11 and \$7.25 million for calendar year 2016.

## Appendix A – Code of Laws Section 38-71-280

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### Autism spectrum disorder; coverage; eligibility for benefits.

(A) As used in this section:

(1) "Autism spectrum disorder" means one of the three following disorders as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association:

- (a) Autistic Disorder;
- (b) Asperger's Syndrome;
- (c) Pervasive Developmental Disorder - Not Otherwise Specified.

(2) "Insurer" means an insurance company, a health maintenance organization, and any other entity providing health insurance coverage, as defined in Section 38-71-670(6), which is licensed to engage in the business of insurance in this State and which is subject to state insurance regulation.

(3) "Health maintenance organization" means an organization as defined in Section 38-33-20(8).

(4) "Health insurance plan" means a group health insurance policy or group health benefit plan offered by an insurer. It includes the State Health Plan, but does not otherwise include any health insurance plan offered in the individual market as defined in Section 38-71-670(11), any health insurance plan that is individually underwritten, or any health insurance plan provided to a small employer, as defined by Section 38-71-1330(17).

(5) "State Health Plan" means the employee and retiree insurance program provided for in Article 5, Chapter 11, Title 1.

(B) A health insurance plan as defined in this section must provide coverage for the treatment of autism spectrum disorder. Coverage provided under this section is limited to treatment that is prescribed by the insured's treating medical doctor in accordance with a treatment plan. With regards to a health insurance plan as defined in this section an insurer may not deny or refuse to issue coverage on, refuse to contract with, or refuse to renew or refuse to reissue or otherwise terminate or restrict coverage on an individual solely because the individual is diagnosed with autism spectrum disorder.

(C) The coverage required pursuant to subsection (B) must not be subject to dollar limits, deductibles, or coinsurance provisions that are less favorable to an insured than the dollar limits, deductibles, or coinsurance provisions that apply to physical illness generally under the health insurance plan, except as otherwise provided for in subsection (E). However,

the coverage required pursuant to subsection (B) may be subject to other general exclusions and limitations of the health insurance plan, including, but not limited to, coordination of benefits, participating provider requirements, restrictions on services provided by family or household members, utilization review of health care services including review of medical necessity, case management, and other managed care provisions.

- (D) The treatment plan required pursuant to subsection (B) must include all elements necessary for the health insurance plan to appropriately pay claims. These elements include, but are not limited to, a diagnosis, proposed treatment by type, frequency, and duration of treatment, the anticipated outcomes stated as goals, the frequency by which the treatment plan will be updated, and the treating medical doctor's signature. The health insurance plan may only request an updated treatment plan once every six months from the treating medical doctor to review medical necessity, unless the health insurance plan and the treating medical doctor agree that a more frequent review is necessary due to emerging clinical circumstances.
  
- (E) To be eligible for benefits and coverage under this section, an individual must be diagnosed with autistic spectrum disorder at age eight or younger. The benefits and coverage provided pursuant to this section must be provided to any eligible person under sixteen years of age. Coverage for behavioral therapy is subject to a fifty thousand dollar maximum benefit per year. Beginning one year after the effective date of this act, this maximum benefit shall be adjusted annually on January first of each calendar year to reflect any change from the previous year in the current Consumer Price Index, All Urban Consumers, as published by the United States Department of Labor's Bureau of Labor Statistics.

HISTORY: 2007 Act No. 65, Section 1, eff July 1, 2008, applicable to health insurance plans issued, renewed, delivered, or entered into on or after that date.

## Appendix B – Senate Bill 135

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A BILL TO AMEND SECTION 38-71-280, CODE OF LAWS OF SOUTH CAROLINA, 1976, RELATING TO HEALTH INSURANCE COVERAGE FOR AUTISM SPECTRUM DISORDER, SO AS TO REVISE RELATED DEFINITIONS, TO DELETE EXISTING ELIGIBILITY REQUIREMENTS, AND TO PROVIDE A CITATION TO THE SECTION AS BEING “RYAN’S LAW”.

Be it enacted by the General Assembly of the State of South Carolina:

SECTION 1. Section 38-71-280 of the 1976 Code, as added by Act 65 of 2007, is amended to read:

“Section 38-71-280. (A) As used in this section:

(1) ‘Autism spectrum disorder’ means ~~one of the three following disorders as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association:~~

~~(a) Autistic Disorder;~~

~~(b) Asperger’s Syndrome;~~

~~(c) Pervasive Developmental Disorder Not Otherwise Specified~~ any of the pervasive development disorders or autism spectrum disorders as defined by the most recent addition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) or the edition in effect at the time of diagnosis.

(2) ‘Insurer’ means an insurance company, a health maintenance organization, and any other entity providing health insurance coverage, as defined in Section 38-71-670(6), ~~which is licensed to engage in the business of insurance in this State and which is subject to state insurance regulation.~~

(3) ‘Health maintenance organization’ means an organization as defined in Section 38-33-20 (8).

(4) ‘Health insurance plan’ means a group health insurance policy or group health benefit plan offered by an insurer. It includes the State Health Plan, ~~but does not otherwise include any health insurance plan offered in the individual market as defined in Section 38-71-670(11), any health insurance plan that is individually underwritten, or any health insurance plan provided to a small employer, as defined by Section 38-71-1330(17) of the 1976 Code.~~

(5) ‘State Health Plan’ means the employee and retiree insurance program provided for in Article 5, Chapter 11, Title 1.

(B) A health insurance plan as defined in this section must provide coverage for the treatment of autism spectrum disorder. Coverage provided under this section is limited to treatment that is prescribed by the insured’s treating medical doctor in accordance with a treatment plan. With regards to a health insurance plan as defined in this section an insurer may not deny or refuse to issue coverage on, refuse to contract with, or refuse to renew or refuse to reissue or otherwise terminate or restrict coverage on an individual solely because the individual is diagnosed with autism spectrum disorder.

(C) The coverage required pursuant to subsection (B) must not be subject to dollar limits, deductibles, or coinsurance provisions that are less favorable to an insured than the dollar limits, deductibles, or coinsurance provisions that apply to physical illness generally under the health insurance plan, except as otherwise provided for in subsection (E). However, the coverage required pursuant to subsection (B) may be subject to other general exclusions and limitations of the health insurance plan, including, but not limited to, coordination of benefits, participating provider requirements, restrictions on services provided by family or household members, utilization review of health care services including review of medical necessity, case management, and other managed care provisions.

(D) The treatment plan required pursuant to subsection (B) must include all elements necessary for the health insurance plan to appropriately pay claims. These elements include, but are not limited to, a diagnosis, proposed treatment by type, frequency, and duration of treatment, the anticipated outcomes stated as goals, the frequency by which the treatment plan will be updated, and the treating medical doctor’s signature. The health insurance plan may only request an updated treatment plan once every six months from the treating medical doctor to review medical necessity, unless the health insurance plan and the treating medical doctor agree that a more frequent review is necessary due to emerging clinical circumstances.

~~(E) To be eligible for benefits and coverage under this section, an individual must be diagnosed with autistic spectrum disorder at age eight or younger. The benefits and coverage provided pursuant to this section must be provided to any eligible person under sixteen years of age. Coverage for behavioral therapy is subject to a fifty thousand dollar maximum benefit per year. Beginning one year after the effective date of this act, this maximum benefit shall be adjusted annually on January 1 of each calendar year to reflect any change from the previous year in the current Consumer Price Index, All Urban Consumers, as published by the United States Department of Labor’s Bureau of Labor Statistics. This section must be known and may be cited as ‘Ryan’s Law.’~~

SECTION 2. This act takes effect upon approval by the Governor.

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## Appendix C – ASOP 41 Disclosures

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The Actuarial Standards Board (ASB), vested by the U.S.-based actuarial organizations<sup>12</sup>, promulgates actuarial standards of practice (ASOPs) for use by actuaries when providing professional services in the United States.

Each of these organizations requires its members, through its Code of Professional Conduct<sup>13</sup>, to observe the ASOPs of the ASB when practicing in the United States. ASOP 41 provides guidance to actuaries with respect to actuarial communications and requires certain disclosures which are contained in the following.

### *Identification of the Responsible Actuary*

The responsible actuaries are:

- David M. Dillon, FSA, MAAA, MS, Vice President & Principal at Lewis & Ellis, Inc.
- Sergei V. Mordovin, ASA, MAAA, Consulting Actuary at Lewis & Ellis, Inc.

These actuaries are available to provide supplementary information and explanation.

### *Identification of Actuarial Documents*

The date of this document is June 18, 2015. The date (a.k.a. “latest information date”) through which data or other information has been considered in performing this analysis is June 11, 2015.

### *Disclosures in Actuarial Reports*

- The purpose of this report is to assist the South Carolina Department of Insurance in assessing the fiscal impact of S. 135.
- The authors of this report are aware that it will be distributed to third parties. Any third party with access to this report acknowledges, as a condition of receipt, that they cannot bring suit, claim, or action against L&E, under any theory of law, related in any way to this material.
- L&E is financially and organizationally independent from the health insurance issuers who may be impacted by S. 135. There is nothing that would impair or seem to impair the objectivity of the work.
- The responsible actuaries identified above are qualified as specified in the Qualification Standards of the American Academy of Actuaries.
- L&E has reviewed the data provided for reasonableness, but it was not audited. Neither L&E nor the responsible actuaries assume responsibility for these items that may have a material impact on the analysis. To the extent that there are material inaccuracies in,

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<sup>12</sup> The American Academy of Actuaries (Academy), the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries.

<sup>13</sup> These organizations adopted identical Codes of Professional Conduct effective January 1, 2001.

misrepresentations in, or lack of adequate disclosure by the data, the results may be accordingly affected.

- L&E is not aware of any subsequent events that may have a material effect on the findings.
- There are no other documents or files that accompany this report.
- The findings of this report are enclosed herein.

*Actuarial Findings*

The actuarial findings of the report can be found in the body of this report.

*Methods, Procedures, Assumptions, and Data*

The methods, procedures, assumptions and data used by the actuary can be found in body of this report.

*Assumptions or Methods Prescribed by Law*

This report was prepared as prescribed by applicable law, statues, regulations and other legally binding authority.

*Responsibility for Assumptions and Methods*

The actuaries do not disclaim responsibility for material assumptions or methods.

*Deviation from the Guidance of an ASOP*

The actuaries have not deviated materially from the guidance set forth in an applicable ASOP.