



JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION
Fiscal Impact Review
2011 Session

Bill Number: SB 1061 as Introduced
Review Requested By: Senator Colgan

JLARC Staff Fiscal Estimates

JLARC staff do not concur with the estimates in the Fiscal Impact Statement (FIS) for SB 1061. SB 1061 would require the state employee health plan to provide coverage for the diagnosis and treatment of autism spectrum disorder in individuals from age two through age six. JLARC staff estimate the general fund cost of providing this coverage to range from approximately \$590,000 to \$820,000 annually, with first year costs of approximately half that to account for the phased in utilization of the benefit. This compares to the general fund cost in the FIS of \$2.8 million.

The JLARC staff estimates are substantially lower than those in the FIS for two primary reasons. First, the JLARC estimates are based on providing coverage to children age two through six, whereas the FIS estimates appear to be based on providing coverage to children age one through seven. In addition, the JLARC estimates are based on the assumption that only children with autism (estimated to be approximately 40 percent of children with ASDs) would access highly intensive behavioral interventions at early ages (age two or three). Autism experts indicate that intense behavioral interventions are typically not appropriate for children with other forms of ASDs (such as Asperger's Syndrome and PDD-NOS), and that these children are typically not diagnosed until age five or six, so would not start accessing benefits until this age.

The premium impacts related to the JLARC estimates (ranging from \$0.57 to \$0.78 per member per month) appear to be similar to the experience of other states.

An explanation of the JLARC staff review is included on the following pages.

Authorized for Release:



Glen S. Tittermary
Director

Bill Summary: SB 1061 requires that the health insurance plan for state employees provide coverage for the diagnosis and treatment of autism spectrum disorder (ASD) in individuals from age two through age six. Applied behavioral analysis (ABA) is included as a covered service under SB 1061, and SB 1061 includes an annual maximum benefit amount of \$35,000, unless the plan elects to provide coverage in a greater amount.

Discussion of Fiscal Implications: The Fiscal Impact Statement (FIS) for SB 1061 estimates the following annual costs for SB 1061:

- \$2,842,544 General Fund-Employer premiums
- \$2,303,647 Non-general Fund – Employer premiums
- \$431,396 State Employee Premiums
- \$513,409 Retired State Employee Premiums
- \$1,219,008 Non-general funds (Localities and Local Employees)

The total state cost estimated in the FIS is \$6.1 million, with a general fund cost of \$2.8 million. Based on an analysis of the assumptions used to derive these costs, JLARC staff estimates that the costs of SB 1061 could be substantially less than described in the FIS. In particular, it appears that the population of children estimated to receive intensive behavioral therapies, such as ABA, would likely be considerably less than those assumed in the FIS, and the annual cost of the therapies received by children with ASDs could also be much lower than those assumed in the FIS. Further, the full costs of providing the coverage in SB 1061 would likely not be realized in the first year. (The estimates in the FIS also include \$1.5 million for the Optima portion of the state employee health plan. Administration officials indicate that the estimate for Optima will likely be reduced by approximately \$1 million.)

Children Receiving Services Under SB 1061

The fiscal estimates in the FIS are based on the number of children aged one through seven covered through the state employee health plan with a diagnosis of ASD (assuming the nationally estimated ASD prevalence of one in 110). The estimates in the FIS also assume that all of these children (estimated to be 119 in total) would access benefits for the full duration of years covered under the bill.

The number of children receiving services assumed in the FIS are likely high for a number of reasons. First, SB 1061 covers children aged two through six rather than one through seven. Second, while autism experts consulted by JLARC staff indicate that the average age of diagnosis of autism is age two or three, the average age of diagnosis for Asperger's Syndrome and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS), the two other major categories of ASDs covered by SB 1061, is generally not until age five or six. Therefore, children with Asperger's Syndrome and PDD-NOS would not likely begin accessing services until the last two years that they are covered by the bill.

The autism literature includes a range of estimates for the proportion of children with ASDs that have autism, Asperger's Syndrome, and PDD-NOS. Based on the literature, it appears that a conservative estimate is that 40 percent of children with ASDs have autism, while the remaining 60 percent have Asperger's Syndrome or PDD-NOS (or several other rare types of ASDs). Assuming this distribution of diagnoses and an ASD prevalence of 1/110 among children covered by the state employee health plan, 38 children aged two through six covered by the state employee health plan are estimated to have autism, with another 57 children in this age range estimated to have Asperger's Syndrome or PDD-NOS (based on June 30, 2010 membership data).

JLARC offers Fiscal Impact Reviews in accordance with Item 30D of Chapter 874 (2010 Acts of Assembly). JLARC Fiscal Impact Reviews do not comment on the merits of the bill under review.

Average Cost of Services Under SB 1061

The cost estimates in the FIS are based on all children with a diagnosis of ASD receiving services at an average annual cost of \$42,500. This average annual cost is likely high for several reasons. First, this estimate appears to be based on a level of services that would include intensive behavior therapy, such as ABA-based therapy, for all children receiving services. Autism experts consulted by JLARC staff indicated that ABA-based therapy is typically used only for children with autism. Children with Asperger's Syndrome and PDD-NOS typically receive a much lower intensity of services and at an older age given the later diagnosis.

Second, based on autism experts and the experience of other states, \$42,500 appears high as an *average* cost, even if it includes ABA-based services. South Carolina has covered treatment for ASD (including ABA-based therapy) for children up to age 16 in its state employee health plan for the past two years. Based on 2010 data, the average annual claims cost was around \$26,000 in South Carolina. Blue Cross Blue Shield (BCBS) has also covered treatment for ASDs in both commercial and public programs in Minnesota for a number of years. Using 2007 data from BCBS, the average annual cost per patient for intensive behavioral therapies is approximately \$32,500.

The annual costs of services for children with Asperger's Syndrome and PDD-NOS is not well-documented in the literature. However, based on the BCBS data, it appears that the average annual cost for individuals diagnosed with ASD who do not access intensive behavioral therapies could range from approximately \$1,500 to \$6,200.

Therefore, it appears that a more realistic estimate of average costs would be based on assuming the higher level of services and associated costs for the estimated 40 children with autism, and the lower level of services and associated costs for the estimated 57 children with Asperger's or PDD-NOS.

Total Estimated Cost of Services Under SB 1061

The table below shows the range in potential costs for SB 1061 depending on the average annual cost of services accessed by children diagnosed with ASD. It generally takes several months or years for a new health benefit to be fully utilized as individuals learn about its availability and find providers. Therefore, the FY 2012 estimated costs are approximately half the costs estimated for FY 2013, which represents the full phase in of the benefit. (This is based on the experience of South Carolina in which the total costs the first year of providing ASD coverage were slightly less than half the cost in the second year.)

The total state cost of SB 1061 at full phase-in are estimated to range from \$1.3 million to \$1.8 million, with the general fund cost estimated to range from approximately \$590,000 to \$820,000. The higher range of costs in the table below are based on an annual average claims amount of \$42,500. As indicated above, SB 1061 places a \$35,000 cap on annual coverage amounts. Although many states that have passed legislation requiring coverage of treatment for ASDs include coverage caps, it is unclear whether these caps will be able to remain in place in light of recent federal legislation applying to parity in mental health coverage and federal health reform. This issue does not appear to have been settled at the federal level. If Virginia's cap were to stay in place, costs would likely be closer to the lower end of the range. If the cap were not allowed to stay in place, costs would likely be closer to the higher end of the range.

Fiscal Year and Fund	Average Annual Cost Assumptions	
	\$32,500 for autism, \$1,500 for Asperger's Syndrome & PDD-NOS	\$42,500 for autism, \$6,200 for Asperger's Syndrome & PDD-NOS
2012		
General Fund Employer Premiums	\$295,000	\$410,000
Non-General Fund Employer Premiums	240,000	335,000
State Employee Premium	45,000	60,000
Retired State Employee Premium	55,000	75,000
Non-General Fund Localities & Local Employees	155,000	215,000
2013		
General Fund Employer Premiums	\$590,000	\$820,000
Non-General Fund Employer Premiums	480,000	670,000
State Employee Premium	90,000	120,000
Retired State Employee Premium	110,000	150,000
Non-General Fund Localities & Local Employees	310,000	430,000

The estimates in the table above would result in a per member per month (PMPM) premium impact that is closer to what has been experienced in other states compared to the costs estimated in the FIS. The estimates in the table would lead to a PMPM premium impact ranging from \$0.57 to \$0.78 whereas the estimates in the FIS would result in a PMPM premium impact of \$2.24. The 2010 PMPM premium impact as a result of South Carolina's legislation has been \$0.44. The 2007 PMPM premium impact reported by BCBS for its public programs for coverage of ASDs is \$0.79.

Budget Amendment Necessary: Yes. For FY 2012, an increase ranging from \$155,000 to \$215,00 non-general funds in Items 76 and an increase of from \$295,000 to \$410,00 general funds in Item 469. For FY 2013, an increase ranging from \$310,000 to \$430,00 non-general funds in Items 76 and an increase of from \$590,000 to \$820,00 general funds in Item 469.

Agencies Affected: State agencies, state employees, retired state employees, localities participating in the Local Choice program and their employees.

Date Released, Prepared By: 1/26/2011, Kimberly Sarte.