

Economic Impact Assessment

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CDI REG-2013-00006

Title: Autism and Mental Health Parity Regulations

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Description of Problem and Proposed Regulatory Solution

The Problem

A regulation is crucially necessary to elucidate to insurers their obligations under California mental health parity law requiring treatment of children with autism.¹

Autism is a neurobiological disorder and developmental disability that severely limits a child's ability to interact with others. It seriously hinders verbal and nonverbal communication and social interaction. Autism is characterized by repetitive problematic behaviors such as self-mutilation, aggression, and tantrums.

The escalating prevalence of autism among California children has resulted in a public health crisis. Insurer denials and delays of mandated treatment are exacerbating this crisis, causing substantial harm to the public health and welfare and making enormous and unsustainable demands on scarce governmental finances and services, such as special education and adult rehabilitative treatment.²

California's Mental Health Parity Act, which the proposed regulation interprets, was passed in 1999 to remedy a history of inadequate insurance coverage for mental illnesses. Insurers are out of compliance with both the Parity Act and Senate Bill (SB) 946 that reconfirms the mandate for behavioral health treatment for autism and expands the definition of qualified autism service

¹ For this paper, the term autism is used instead of more formal medical or clinical terms. Doctors and therapists refer instead to children with autism spectrum disorders (ASD) or pervasive developmental disorders (PDD).

² Private behavioral therapy services covered in conjunction with special education may be contracted out and paid for by the school, the California Department of Education (CDE), the Department of Developmental Services (DDS) or other parties such as families or charities.

providers as of January 1, 2012. The mandate applies to five conditions on the autism spectrum known as PDD/A.³

Enforcement actions by the California Departments of Insurance (CDI) and Managed Health Care (DMHC) were not sufficient in preventing insurers and health plans from continuing to improperly deny and delay some behavioral health treatments. CDI's Consumer Services division had received 71 complaints, reflecting cumulative delays of 12,864 days, or 35.2 years, in obtaining this medically necessary treatment. According to the Autism Society of California, insurers were paying for only 13% of autism treatment before SB 946 and the emergency regulation went into effect.⁴ The shortfall was leaving taxpayer funded school districts and Department of Developmental Services (DDS) regional centers to bear burdens that they could ill afford in these difficult economic times. CDI's own research, discussed below, is more current and incorporates insurers' rate changes and payment responses to SB 946 in 2012 and the 2013 emergency regulation that became effective March 11, 2013.

Among the medically necessary behavioral health treatments for autism that insurers had been denying was Applied Behavior Analysis (ABA) therapy. This therapy is transformative, enabling many of the treated children to be mainstreamed out of expensive special education classes in the earliest grades and increasing IQ and success in regular school classrooms. Other medically necessary services, on which insurers are imposing inappropriate visit limits, are speech therapy that enables children to communicate with their families, schoolmates, and teachers and occupational therapy that enables them to perform tasks essential to self-care such as dressing and eating.

The Solution

The proposed (permanent) regulation makes only slight additions and changes to the emergency regulation. The regulation will continue to ensure that insurers provide medically necessary treatment for children with autism, and to mitigate the devastating financial consequences to state coffers which flow from continued insurer denials of transformative treatment. Without the emergency regulation and the proposed permanent regulation, insurers are likely to ignore their obligations to provide such services to this vulnerable population, as they have done in the past.

Cost/Benefit Analysis of Proposed Regulation

CDI must assess whether and to what extent the proposed regulations affect the criteria set forth in Government Code § 11346.3(b)(1). The proposed change in regulations will have a very small effect on statewide employment (the creation or elimination of jobs), but will not affect the creation of new businesses or the elimination of existing businesses, or the expansion of

³ PDD/A includes Asperger's Disorder, Autistic Disorder, Childhood Disintegrative Disorder, Pervasive Developmental Disorder Not Otherwise Specified (including atypical autism) (PDD-NOS), and Rett's Disorder.

⁴ Autism Society of California, *Autism in California 2012 Survey* (2012), available at https://autismsocietyca.org/uploads/ASC_Survey_April_2012.pdf

businesses currently doing business within California.⁵ The assumptions, population estimates, actuarial analysis, and cost estimates that were used to assess the employment and business impacts are discussed below.

The Affected Population

In California, 10.3 million children are age 19 and under, according to the Department of Finance’s Demographic Research Unit (DOF DRU).⁶ CDI calculated 206,187 children may be autistic; assuming that one child out of 50 is affected (see Table 1).⁷

Table 1. California Children Affected by Autism and CDI Coverage			
Age	2014 California Projected Population	California Autistic Population	Autistic Population covered by CDI
Under 5 years	2,558,633	51,173	4,965
5 to 9 years	2,525,060	50,501	4,900
10 to 14 years	2,505,235	50,105	4,862
15 to 19 years	2,720,437	54,409	5,279
Total: 0 to 19 years	10,309,364	206,187	20,006

The proposed regulation would affect the health insurance of approximately 3.7 million enrollees regulated by CDI, according to CDI’s covered lives report.⁸ CDI’s covered lives total represents 9.7% of California’s total population of 38.4 million.⁹ Therefore, the autistic population affected by this proposed regulation would be 9.7% of the 206,187 children, or roughly 20,000 children.

⁵ CDI must assess the effect on possible changes in employment within California per Government Code§ 11346.3(b)(1)(A), the creation of new businesses or the elimination of existing businesses within California per Government Code§ 11346.3(b)(1)(B), and the expansion of businesses currently doing business within California per Government Code§ 11346.3(b)(1)(C).

⁶ State of California, Department of Finance, Report P-2: State and County Population Projections by Race/Ethnicity and 5-Year Age Groups, 2010-2060, January 2013.

⁷ Autism prevalence rate of 1 per 50 children; Blumberg SJ, Bramlett MD, Kogan MD, et al. *Changes in prevalence of parent-reported autism spectrum disorder in school-aged U.S. children: 2007 to 2011–2012*. National Health Statistics Reports, No. 65, Hyattsville, MD: National Center for Health Statistics. 2013.

⁸ State of California, Department of Insurance, Statistical Analysis Division Health Disability Insurance Data Call, Covered Lives Report. 2013. <<http://www.insurance.ca.gov/0100-consumers/0020-health-related/upload/AB1083SUMMARY.pdf>>

⁹ Ibid, Department of Finance, Report P-2

The proposed regulation would affect treatment options for more than 3,500 autistic children. Estimates were derived by applying differing utilization rates by age group (see Table 2).¹⁰

Table 2. CDI Children Seeking Therapy		
Age	Therapy Utilization Rates	CDI Children Seeking Treatment
Under 5 years	40%	1,986
5 to 9 years	20%	980
10 to 14 years	10%	486
15 to 19 years	1%	53
Total: 0 to 19 years		3,505

Behavioral therapy such as ABA is most effective and most utilized for younger children.

Coverage for intensive behavioral intervention therapies for PDD/A is already required for DMHC-regulated plans and CDI-regulated policies under the Mental Health Parity Act (MHPA) of 1999, the recently passed SB 946, and legal precedent.^{11 12}

CDI determined the emergency

regulation was needed to effect changes in coverage that both the MHPA and SB 946 failed to achieve. The proposed permanent regulation could potentially change the lives of 3,505 children and their families as they benefit from specialized behavioral therapy.

Long-Term Savings to Government and Taxpayers

CDI estimated the savings to school districts through reduced special education costs. Studies have found that half of the children who receive three years of intensive ABA therapy can successfully participate in mainstream education after the treatment and thus avoid the high costs of special education for the remainder of their education, which may otherwise last 18 years or continue to age 22.

According to the California Legislative Analyst's Office (LAO), it costs \$12,700 more per year for a special education student than for a student without special needs. Additionally, LAO found that the increased funding needed to support special education came from federal, state, and local sources.¹³

¹⁰ California Health Benefits Review Program, Analysis of Senate Bill 126: Table D-2, 2013.

¹¹ In the Harlick v. Blue Shield decision, 686 F.3d 699 (2012), the Ninth Circuit Court of Appeal held that the MHPA mandates coverage for all medically necessary treatment for severe mental illnesses, in this instance anorexia, even though the residential treatment at issue was excluded from coverage in three places in Ms. Harlick's insurance policy.

¹² SB 126 would reauthorize SB 946 and extend the coverage mandate to July 1, 2017. Medi-Cal Managed Care Plans and the California Public Employees' Retirement System (CalPERS) are currently exempted from the SB 946 coverage mandate.

¹³ California Legislative Analyst's Office. Overview of Special Education in California. January 3, 2013. <http://www.lao.ca.gov/reports/2013/edu/special-ed-primer/special-ed-primer-010313.aspx>

The forecasting model in a paper titled, *Cost Comparison of Early Intensive Behavioral Intervention and Special Education for Children with Autism*¹⁴ was used to estimate that the savings of providing ABA or early intensive behavioral intervention (EIBI) therapy to autistic children enrolled in CDI regulated health plans would be more than \$170.5 million dollars for school age children who receive therapy (up to age 22). The Chasson-Harris model displays the aggregate benefit for the therapy, which averages almost \$42,200 per year and in many cases is needed for three years.¹⁵ The Chasson-Harris report notes that 50% of children can be mainstreamed into regular classrooms, 40% of children will make moderate gains resulting in a

Table 3. Savings from Applied Behavioral Therapy or EIBI		California
EQ 1	$C1 = S(18) - [E(3) + S(.28)(15)]$ where C1 = Per child savings savings come when no additional special education is required for 72% of children	<u>2014</u> \$48,660
Assumptions and Calculations:		
	S = Annual special education costs	\$12,700
	E = Annual behavioral therapy costs	\$42,200
	Funds provided by the state (18 x S) above costs of main stream education	\$228,600
	E3 = Costs for ABA for three years (3 x E)	\$126,600
	R = 28% of special education for 15 years (failure to mainstream some children) R = (S x 0.28 x 15)	\$53,340
	Total cost per child who receives EIBI (E3+R)	\$179,940
	P = Population of Autistic children	<u>Ages 0-19</u> 3,505
EQ 2	$C2 = S(18)(P) - [E(3)(P) + S(.28)(15)(P)]$ where C2 = Savings for all children or to simplify, $C2 = C1 \times P$	\$170,553,300

¹⁴ Chasson G, Harris G, et al., *Cost Comparison of Early Intensive Behavioral Intervention and Special Education for Children with Autism*, 2007.

¹⁵ Dr. Daniel Shabani, Board Certified Behavior Analyst and President of the California Association for Behavior Analysis helped CDI identify the number of hours, the number of weeks and the standards of care typically required for children of varying ages. Calculations for the \$42,200 cost are in Table 4.

savings of 55%, and only 10% of children will not significantly improve from ABA therapy. To make savings calculations feasible the authors split the middle 40%, so the *three-outcome reality* could be simplified to a *two-outcome scenario*. This critical step makes it possible to calculate savings. Splitting the middle 40% and the costs associated with them results in 72% of children mainstreamed successfully and 28% of children showing no significant improvement (i.e. the 40 children with moderate gains were split and reallocated into just two categories).

In their simplified modeling environment depicted in Table 3, savings occur if autistic children are able to be mainstreamed. The Chasson-Harris report and their assumptions are critical for this analysis, specifically when calculating offsets to the total cost of treatment and when calculating the near-term savings to local governments and schools. Using their model, the initial outlays made by schools are completely repaid after 10 years, assuming three full years of treatment. Since savings accrue over the child's K-12 experience local governments and/or schools will not realize all of the \$170.6 million in savings noted in the last line of Table 3 for several years. Again, according to the report's authors, the therapy does not allow all children to go from special education to mainstream classrooms, but assumes the cost equivalent of 72% of children can be mainstreamed.

In addition to the expected savings of school districts, DDS expected an estimated savings of \$79.8 million due to the implementation of SB 946 for FY 2012-13, as costs shift to insurers and policyholders.¹⁶ CDI's emergency regulation will further assist DDS in fully realizing \$7.7 million of that savings (\$79.8 million x 9.7 % of population covered by CDI) each year.

Mainstreaming children educationally and medically is important to society since adult care is the largest cost incurred by autistic persons in their lifetime. Without the treatment, society could bear lifetime costs of up to \$3.2 million per person.¹⁷ For the projected population transferring treatment to private insurers in 2014, this results in a savings to society of nearly \$1.8 billion.¹⁸

Non-monetary benefits

Outside of the special education and DDS regional center savings, there are important non-monetary benefits to the proposed regulation. First, because the behavioral therapy treatments are transformative, they allow many autistic children and their families to have a higher quality of life. Second, these treatments allow most children to communicate more effectively with teachers and family members and to perform basic functions like getting dressed, grooming themselves,

¹⁶ California Department of Developmental Services, *Proposals to Achieve \$200 Million General Fund Savings*, May 2012. http://www.dds.ca.gov/Budget/Docs/2012_MayRevisionSummarySavingsProposals.pdf

¹⁷ Ganz ML, The Lifetime Distribution of the Incremental Societal Costs of Autism, *Arch Pediatric Adolescent Med.*, 2007;161(4):343-349. doi:10.1001/archpedi.161.4.343. <http://archpedi.jamanetwork.com/article.aspx?articleid=570087>

¹⁸ As assumed by the Chasson, Harris, etc., 72% of the 3,505 kids seeking treatment will not need adult care. Of the remaining 2,524 children, it is estimated that 78% (see Table 5) of them are currently covered by private insurers as of 2013. The \$1.8 billion is equal to the remaining 22% of children that would be specifically helped by the regulation from 2014 onwards (555 multiplied by \$3.2 million).

or riding bikes to school. CDI did not have literature or models as a basis for quantifying these benefits, so they are simply listed as non-monetary.

Costs of proposed regulations

In a single year, the total cost of providing behavioral therapy for the 3,505 CDI children is estimated to be \$147.8 million per year. The total therapy cost was derived using estimates for wages, hours, and overhead costs of qualified autism service providers (see Table 4).¹⁹

Table 4. Behavioral Therapy Costs					
Age	CDI Children Seeking Treatment	Average Therapy Hours per Child per Week	Average Therapy Hours per Child per Year	Median Hourly Wage	Annual Cost
Qualified Autism Service Professional	3,505	30	1,380	\$22.42	\$108,443,298
Qualified Autism Service Provider	3,505	3	138	\$39.24	\$18,979,996
Overhead- 16%					\$20,387,727
Total Cost	3,505	33	1,518		\$147,811,021

The \$147.8 million per year cost estimate for providing behavioral therapy for the CDI population of 3,505 kids was derived by looking at the median hourly wages of likely caregivers and by looking at the nature of the treatment being provided. The estimate assumes 30 hours of behavioral therapy per week provided by a qualified autism service professional at the median hourly wage of \$22.42, and three supervisory hours provided by a qualified autism service provider at the median hourly wage of \$39.24. CDI assumed that treatment is provided for 46 weeks out of 52 during the year. Wages alone account for approximately \$127.4 million of the total cost estimate. Most behavioral therapy is done either at the patient’s home or in a small medical office, and overhead expenditures of 16% account for transportation, telecommunications, and computer equipment. Overhead adds another \$20.4 million and brings the total to \$147.8 million or nearly \$42,200 per child per year.

CDI’s estimate represents the average cost of providing 30 hours of behavioral therapy and three hours of supervision to every CDI covered child who seeks it; regardless of who is paying for

¹⁹ CDI used job listings and O*Net OnLine descriptions of reported job titles, skills, training, and required experience to find Standard Occupational Classifications (SOC) that closely match behavioral therapy providers. SOC 21-1023: Mental Health and Substance Abuse Social Workers and SOC 19-3031: Clinical, Counseling, and School Psychologists were chosen to represent Qualified Autism Service Professionals and Qualified Autism Service Providers, respectively; for the purpose of finding a comparable wage. The chosen wages are representative of the first quarter of 2013 and are published by the state’s Employment Development Department, Labor Market Information Division. Offices and overhead were assumed to be similar to costs for physical therapists, with higher transportation expenses replacing some of the costs of office space.

that treatment. Some of the younger children are assumed to need more than 30 hours per week and older children will likely need less than 30 hours as they spend more time at school.

Shifting financial obligations

Therapy was being provided to children with autism prior to passage of SB 946 and the emergency regulations; only the financially responsible parties are changing. As mentioned earlier, in 2011, insurers were paying about 13% of the costs of therapy, or \$19.2 million when combined with policyholders' copayments and deductibles (see p. 2). At that time, costs were paid by a combination of payers: parents; private insurers; charities and others; plus all three levels of government. Federal funds were provided for children under the Individuals with Disabilities Education Act. The state government was providing funds to DDS regional centers and education funding to local governments and schools. Local governments and school districts directly provide therapy and special education.

The rapidly changing legal environment, including SB 946, the Harlick decision, and CDI enforcement actions, caused insurers to begin changing premiums to pay for new coverage obligations over two years. According to a review conducted by CDI's actuarial and health policy staff, insurance companies raised monthly premiums by an average of \$1.08 per member in 2012, to offset the costs of the behavioral treatments required by law. Over the course of a fiscal year, that amounted to \$48 million that insurance companies were assumed to have paid for mental health treatments. On a calendar year basis, half of the \$48 million or \$24 million was attributed to 2012 and the other half to 2013. Since the insurers raised premiums in mid-year rate filings for 2012, the entire \$48 million was attributed to SB 946 and not to the emergency or permanent (proposed) regulation which came later, and would affect 2013.

In early March 2013, the emergency regulations were adopted, shifting more of the ongoing costs to insurers and policyholders (households) and away from the government providers. CDI's actuary also found evidence that insurance companies made another incremental adjustment to premiums in 2013, accounting for another \$7.1 million dollars to cover autism. With the total adjustment for Harlick, the emergency regulation and the remaining six-months of SB 946 adjustments, insurers seem to have set aside an additional \$31.1 million for 2013. By the end of 2013, CDI estimates that 78% of the costs for therapy had been incorporated into rates, copayments and medical offsets. In other words, 78% of the costs had already been shifted away from government.

As insurers raised premiums to cover mental health treatments, households (policyholders) using the therapy benefits incurred corresponding copayments and deductibles. Assuming that the rate of 27% of the total cost remains constant for mental health treatments, as much as \$7.6 million will have to be picked up in the next year by parents and other policyholders (see Table 5).²⁰

²⁰ CDI's actuarial and health policy staff reviewed various sources from the California Simulation of Insurance Markets, the California Health Interview Survey, CalPERs, and California Health Benefit Review Program's Annual Enrollment and Premium Survey contributed to the report of California Health Benefit Review Program, 2013. Staff found that in all large group, small group and individual health plans, deductibles and co-payments account for 27% of the total cost.

CDI assumes that by the end of 2014, these costs will no longer be borne by government. Further premium adjustments may be possible in 2014, as insurers gain experience with claims formerly handled by regional centers and schools, as discussed below.

Table 5. Shifting of Estimated Annual Therapy Costs for Autistic Children Over Four Years				
	2011	2012	2013 (Estimated)	2014 (Projected)
Total Annual Therapy Cost for CDI Covered Autistic Children (All Payers)	\$147,811,021	\$147,811,021	\$147,811,021	\$147,811,021
Incremental Costs Paid by Insurers for Current Year	\$19,215,433	\$24,000,000	\$31,100,000	\$20,481,936
Incremental Deductible and Copayment Costs Paid by Households for Current Year	\$7,107,078	\$8,876,712	\$11,502,740	\$7,575,511
Incremental Medical Treatment Savings (2012 Dollars)	\$2,333,710	\$5,924,032	\$5,744,516	\$3,949,355
Cumulative Costs Covered in Prior Years (Households, Insurers, Medical Savings)	unknown	\$28,656,220	\$67,456,964	\$115,804,220
Cumulative Percentage Covered (Households, Insurers, Medical Savings)	19%	46%	78%	100%
Remaining Therapy Costs (All Payers)	\$119,154,800	\$80,354,056	\$32,006,801	\$0

Based on the medical treatment savings data in Table 5, the permanent regulations are also likely to save insurance companies money in the long run, since many children can be mainstreamed medically just as they are in classrooms. As autistic children gain higher functioning at school, they will also become easier to treat in hospitals. Their medical treatment costs will decline and be more in line with the costs incurred by the general population. With early intensive behavioral treatment, the autistic children can be more easily examined by medical providers; they become better communicators and can be treated more like regular patients. The medical savings were calculated based on an article published by the American Academy of Pediatrics that found, “Total health care costs were three times higher for children with ASDs because of increased costs for hospitalizations, medications, and outpatient clinic visits.”²¹ CDI used the ratios from the American Academy of Pediatrics article and the baseline costs found in *The Lifetime Distribution of the Incremental Societal Costs of Autism* by Ganz ML, to estimate potential savings to insurers.

²¹ Croen L, Najjar D, et al. A Comparison of Health Care Utilization and Costs of Children With and Without Autism Spectrum Disorders in a Large Group-Model Health Plan. *Pediatrics* 2006;118:e1203 DOI: 10.1542/peds.2006-0127

CDI includes medical savings as an offset to the total cost, assuming that without the permanent regulation in place insurance companies would stop providing some of the behavioral health treatment and these savings would not be fully realized. Since 2011, insurers have been incrementally picking up growing portions of the cost of behavioral therapy while the government sector and taxpayers pay less of the \$147.8 million annual tab (see Table 6).

Table 6. Cumulative Annual Therapy Costs for Autistic Children Over Four Years				
	2011	2012	2013 (Estimated)	2014 (Projected)
Total Annual Therapy Cost for CDI Covered Autistic Children (All Payers)	\$147,811,021	\$147,811,021	\$147,811,021	\$147,811,021
Cumulative Costs Paid by Insurers (Includes current year)	\$19,215,433	\$43,215,433	\$74,315,433	\$94,797,369
Cumulative Deductible and Copayment Costs Paid by Households (Includes current year)	\$7,107,078	\$15,983,790	\$27,486,530	\$35,062,040
Cumulative Medical Treatment Savings (Includes current year)	\$2,333,710	\$8,257,742	\$14,002,257	\$17,951,612
Remaining Therapy Costs (All Payers)	\$119,154,800	\$80,354,056	\$32,006,801	\$0

Next year, the process should be nearly complete as insurers pay the remaining balance of as much as \$20.5 million, bringing their cumulative total contribution to an estimated \$94.8 million. The actual cost to insurers in 2014 is best represented as a range from zero to \$20.5 million, since insurers will make efforts to manage costs with health insurance management programs such as network management, disease management, and case management. This is the range of remaining total direct costs to insurance companies, for critical therapies that DDS regional centers, schools, parents, charities and other institutions used to pay. Insurers may be responding to the regulations in one of three ways. They may be absorbing the additional costs since the enrollment pool will be expanding in 2014 with the start of the Affordable Care Act. Otherwise, insurers may raise premiums as they did for SB 946 or a take a combination of actions, as discussed on the next page. However, for the reasons cited earlier in this paragraph, insurers are unlikely to raise premiums further.

Economic Impacts

Determinations were made by evaluating the changes in a variety of economic variables such as personal income and Gross State Product (GSP) or state Gross Domestic Product (GDP) that could result from this action.²² Employment, business formation and changes in these state

²² Gross State Product or GDP by state is a measure of a state's current production of goods and services. Change in GDP is the broadest measure of the growth (or contraction) of the national or state economy.

components are captured in GDP by state in the same way that national measures of output such as GDP capture changes in employment, business output and other economic activity from one quarter to the next and from year to year.

Industry employment and output effects were assessed using standard Regional Input-Output Modeling System (RIMS II) multipliers.²³ Employees are captured in GDP by state through their earnings and/or income.²⁴ As employees retire and are not replaced in the government sector the losses are reflected as reductions in state GDP and other measures of output. The government sector will transfer the remaining \$32 million in annualized payment responsibilities to insurers (\$20.5 mil.), to policyholders or households (\$7.6 mil.) and to physicians, dentists, hospitals and other medical providers (\$3.9 mil.) who will lower costs due to medical mainstreaming.

California's GDP, its personal income and its personal consumption expenditures would be affected by the proposed regulations, because of the one-time cost shift in financial responsibility away from government entities, although the net effects would be minimal.

With the expected incremental outlays, portrayed in Table 5, savings will accrue to taxpayers via savings to DDS regional centers, and school districts. CDI assumes no lag or delay in savings, since the therapy, in most cases, has been continuously provided by other payers besides insurers, back to 2011 and before.²⁵

Using RIMS II multipliers, CDI evaluated the statewide economic impacts of initially increasing the California insurance industry's business costs by about \$20.5 million.²⁶ Since insurers are permitted to pass the higher costs on to their policy holders, CDI cannot precisely model the impact the cost increase will have. Given that insurers have already increased premiums due to SB 946, there are several possibilities for 2013 and 2014. Insurers may further increase premiums and thereby pass the financial burden on to households (policyholders) but CDI assumes this is unlikely since insurers will probably make efforts to better manage costs with health insurance management programs such as network management, disease management, and case management; the insurance industry might absorb the higher costs, reduce staff or cut

²³ Table 1.5 Regional Input-Output Modeling System (RIMS II) Multipliers (2002/2008). RIMS II data are from the U. S. Department of Commerce, Bureau of Economic Analysis (BEA). There are three assumptions. First, industries can increase their demand for inputs and labor as needed to meet additional demand. Second, firms have fixed patterns of purchasing, e.g. an industry must double its inputs to double its output. Third, firms purchase inputs from firms within the region (California) before using imports.

²⁴ See Regional Multipliers, A User Handbook for the Regional Input-Output Modeling System (RIMS II), <https://www.bea.gov/scb/pdf/regional/perinc/meth/rims2.pdf>

²⁵ Some of the autism coverage and therapy will continue to be provided by various government providers, charities, relatives and other sources because of the high cost of the deductibles and co-payments and their effects on lower income households.

²⁶ RIMS II data were used to show the extent of the proposed regulations' effect on possible changes in employment for insurers and overall employment within California per Government Code § 11346.3(b)(1)(A).

operating budgets or profit margins; or insurers may use some combination of the above and pass part of the increase on to policy holders. In combination with implementation of the federal ACA, short-term costs to insurers may ultimately be recovered as the benefits of better care increasingly pay off and as costs can be spread across more new first-time policyholders. The pool has already expanded as parents were allowed to keep children on their policies until age 26 and will expand again in 2014 as more of the uninsured gain coverage through the state's new exchange and government subsidies.

Employment, business formation (contraction), business income, household income and changes in these state components would affect overall output, so state GDP would be affected on a one-time basis as costs are shifted to different payers. The RIMS II output multiplier for calculating the effect on California's GDP for insurance carriers is 2.3191. The net effect of households' costs and insurers' production costs rising are offset by savings to government. The overall result is a small decline in state output of \$8.5 million in 2014.²⁷

Applying RIMS II employment factors indicate that the statewide employment impacts of the shift in payment responsibilities due to the proposed regulations in the first full year (2014) would result in almost no change in staff across all industries (just one employee).²⁸ These are not just the direct effects, but also include induced and indirect effects.

On the benefit side, an equivalent savings from the benefits of intensive behavioral intervention therapies and prescription drugs, to payers other than health plans/insurers would have offsetting beneficial effects distributed across many industries. However, CDI assumes most benefits accrue to government enterprises not including the postal service.

The net effect would be a gain of one position. While the regulations' economic impact may change employment within the insurance industry and other sectors in the economy, the effect on total statewide employment is very small because of offsetting savings to taxpayers and the government sector. According to the most current annual data from the Bureau of Economic Analysis (BEA) for 2011, there were 15.2 million people employed in California.²⁹ The proposed regulations would not even affect one tenth of one percent of total California jobs ($1 / 15,204,435 = .000007\%$).

²⁷ RIMS II multipliers are based on 2008 data and are denominated in 2008 constant dollars. The data represents insurance carriers, government enterprises, hospitals, physicians, dentists and other medical providers.

²⁸ RIMS II data cover broad categories across all industries. Changes in personal income, consumption and state GDP were evaluated based upon Table 1.5, or output for a \$1 million change in business costs in the insurance industry that affect final demand.

²⁹ Bureau of Economic Analysis (BEA), U. S. Department of Commerce is responsible for a wide range of data and information series including the national income and product accounts, gross domestic product (GDP) and personal or household income variables. BEA wage and salary employment data is the most comprehensive and inclusive, but comes available only with a considerable time lag since BEA must include IRS taxpayer data to estimate the employment of the self-employed and proprietors. As of Aug 5, 2013, the most current annual data was still 2011.

Additionally, an increased workforce with diverse skills is a benefit to the economy. Parents who previously coordinated or provided care for their children may now be available for full- or part-time work. Better functioning autistic individuals may be better able to find work without a publicly supported work program. Companies like SAP are already seeing a "potential competitive advantage to leveraging the unique talents of people with autism, while also helping them to secure meaningful employment."³⁰

Given that state GDP is projected to fall slightly, total employment will remain largely unchanged. Because the therapy has been and will be continuously provided, the economic effects of the shift in payment responsibilities will be dispersed across many industries, but it is extremely unlikely that any existing businesses within California would be eliminated (per Government Code section 11346.3(b)(1)(B)), or that businesses currently doing business within California would have to downsize (Government Code section 11346.3(b)(1)(C)) or expand. The negative economic impacts to insurers reflect the upper bound of costs since some costs may be passed along to consumers, even greater costs than estimated in the foregoing analysis could be saved with medical mainstreaming or costs may be mitigated by the spreading of risk and costs through a greater number of insured persons due to implementation of the federal ACA. Insurers are unlikely to raise premiums since they will probably make efforts to manage costs with health insurance management programs such as network management, disease management, and case management.

Impact on Small Businesses and Insurers

The proposed regulations will affect insurers as discussed in the foregoing analysis, but by law, they are not considered small businesses (Government Code sections 11342.610(b)(2)). The job losses and/or production cost increases for insurers have been partially implemented in response to SB 946. The additional costs projected for 2014 are so small that they will not adversely affect these large scale businesses. The regulation will cause one-time adjustments for schools, DDS regional centers, insurers, parents and others. If insurers choose to further raise premiums and pass costs on to households, some self-employed individuals or individual proprietors may be affected. CDI could not break out employment effects for small businesses and sole proprietors, but considering the foregoing analysis, CDI concluded the small business employment and business formation effects will be immaterial.

Government Code sections 11346.3(b)(1)(A) through (C)

The proposed regulations will not have a lasting or permanent effect on changes in overall employment within the State of California (Government Code section 11346.3(b)(1)(A)), the creation of new businesses or the elimination of existing businesses within California (Government Code section 11346.3(b)(1)(B)), or the expansion of businesses currently doing business within the state (Government Code section 11346.3(b)(1)(C)). The cost increases that

³⁰ Moisse, Katie. "Tech Giant Sees 'Competitive Advantage' in Autistic Workforce" ABCNews.go.com. May 22, 2013. <http://abcnews.go.com/Health/Autism/tech-giant-sees-competitive-advantage-autistic-workforce/story?id=19234442>

could potentially be attributed to the regulation merely reflect a shift of costs from government and other payers to insurers and households (policyholders). Insurers may continue to contract with DDS regional centers, private providers and school districts to provide the therapy. Insurers will increasingly reap savings or productivity gains since transformative therapy will create healthier children and allow them to age into productive adults.

Government Code section 11346.3(b)(1)(D)

CDI has also assessed whether and to what extent the proposed regulations affect other criteria set forth in Government Code section 11346.3(b)(1)(D).

Worker Safety and Environmental Effects

Neither the changes in statute nor the proposed regulations will impact worker safety. Compliance with the proposed regulations involves worker actions that fall under the existing routine job responsibilities for all affected employees. Thus, the proposed regulations will neither increase nor reduce worker safety. CDI has also concluded that there would be no effect on the state's environment.

Health and Welfare Effects

CDI has determined that the proposed regulations will be beneficial to the health and welfare of California residents per Government Code section 11346.3(b)(1). The therapy will transform the lives of young children and save the state government millions over the lives of these children as they age. The regulation will also benefit parents and society, as discussed in detail above.