

2015

Does the DSM-5 Threaten Autism Service Access?

Rebecca Johnson
Princeton University

Follow this and additional works at: <http://dc.law.utah.edu/ulr>



Part of the [Health Law and Policy Commons](#)

Recommended Citation

Johnson, Rebecca (2015) "Does the DSM-5 Threaten Autism Service Access?," *Utah Law Review*: Vol. 2015 : No. 4 , Article 12.
Available at: <http://dc.law.utah.edu/ulr/vol2015/iss4/12>

This Symposium is brought to you for free and open access by Utah Law Digital Commons. It has been accepted for inclusion in Utah Law Review by an authorized editor of Utah Law Digital Commons. For more information, please contact valeri.craigle@law.utah.edu.

DOES THE DSM-5 THREATEN AUTISM SERVICE ACCESS?

Rebecca Johnson*

INTRODUCTION

The Diagnostic and Statistical Manual of Mental Disorders (DSM) provides a classification of mental disorders.¹ Its categories outline criteria that a patient must satisfy in order to receive a diagnosis such as autism or major depression.² Changes to DSM, made in the most recent edition of the DSM, DSM-5, have begun to receive significant scrutiny, because the wording of the criteria, the number of criteria a patient must satisfy, and other aspects of DSM guidelines affect *who* can qualify for a DSM diagnosis and as a result, *what* sort of medical and social services they may receive.

On January 19, 2012, the *New York Times* announced that the new definition of autism, scheduled for release the following year in the DSM-5, would exclude many children who had previously received a diagnosis.³ The article covered a study, presented at a meeting of the Icelandic Medical Association, which predicted that the new DSM-5 criteria would only include 60% of the persons who qualified for an autism diagnosis under DSM-IV. As proposed, DSM-5 sought to collapse three disorders—autism, Asperger’s, and pervasive developmental disorder-not otherwise specified—into a single autism category.⁴ The study and its *New York Times* coverage sparked a wave of headlines about how the DSM changes would endanger service access for persons with autism and Asperger’s. *ABC News* announced that a “[n]ew autism definition could exclude many,” and emphasized that “if patients lose their diagnosis status, they might not be able to get the treatments and services provided for autistic patients and their families, which often require a diagnosis to qualify for insurance coverage, special education and other assistance.”⁵ *Reuter’s Health* declared that, “[w]ith autism’s definition set to change,

* © 2015 Rebecca Johnson. Rebecca Johnson is a Medical Sociology Ph.D. candidate at Princeton University and presented at the November 7, 2014, Utah Law Review Symposium, Legal Borders and Mental Disorders: The Challenge of Defining Mental Illness.

¹ *About DSM-5*, AM. PSYCHIATRIC ASS’N, <http://www.dsm5.org/about/Pages/Default.aspx>, archived at <http://perma.cc/97PD-REKX> (last visited Mar. 20, 2015).

² *See id.*

³ Benedict Carey, *New Definition of Autism Will Exclude Many, Study Suggests*, N.Y. TIMES (Jan. 19, 2012), <http://www.nytimes.com/2012/01/20/health/research/new-autism-definition-would-exclude-many-study-suggests.html>, archived at <http://perma.cc/2WSM-B536>.

⁴ James C. McPartland et al., *Sensitivity and Specificity of Proposed DSM-5 Diagnostic Criteria for Autism Spectrum Disorder*, 51 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 368, 368–69 (2012).

⁵ Carrie Gann, *New Autism Definition Could Exclude Many*, ABC NEWS (Jan. 20, 2012, 2:54 PM), <http://abcnews.go.com/blogs/health/2012/01/20/new-autism-definition-could-exclude-many/>, archived at <https://perma.cc/35QP-TZ2K>.

Asperger's patients could lose services," and described the "consternation" that affected families were feeling as a result of the DSM changes.⁶

The media largely claimed that the DSM-5 revisions would endanger access to autism services. Yet despite the wide-ranging media attention given to the issue, there has been little scholarly research exploring the link between the changes to autism in the DSM-5 and access to autism-related services. Most existing research on the impact of the DSM changes has focused on how the changes may impact a child or adolescent's access to a *diagnosis* rather than on how the changes might impact access to the *entitlements associated with a diagnosis*.⁷ Yet the connection between access to a DSM diagnosis and access to related services is far from automatic. For instance, having a diagnosis of autism may *help* a child access special education services under the disability category of autism. But, before this takes place, a separate team must decide that the impairment impedes *educational* functioning in addition to medical functioning. Only then can the child's parents work with the school district to formulate an Individualized Education Plan (IEP). Even then, the final plans may still differ significantly between children with the same DSM diagnosis.⁸

This highlights that the strength of the link between DSM categories and various types of medical, educational, and financial entitlements varies based on how closely the entitlement is *coupled* with the DSM diagnosis. In this context,

⁶ Julie Steenhuisen, *With Autism's Definition Set to Change, Asperger's Patients Could Lose Services*, LOVELAND REPORTER-HERALD (Dec. 21, 2012, 11:30 AM), http://www.reporterherald.com/ci_22239759/autisms-definition-set-change-aspergers-patients-could-lose, archived at <http://perma.cc/N3AM-5SY6>.

⁷ For example, McPartland et al. found that "[g]iven changes to actual symptom descriptions and to the constellation and quantity of symptoms required for diagnosis, it is possible that the autism spectrum would represent a different population of individuals." McPartland et al., *supra* note 4, at 370. But see Roy Grant & Molly Nozyce, *Proposed Changes to the American Psychiatric Association Diagnostic Criteria for Autism Spectrum Disorder: Implications for Young Children and Their Families*, 17 MATERNAL & CHILD HEALTH J. 586, 586–87 (2013), for a discussion of the potential impacts of DSM changes on service entitlements. Grant and Nozyce focus on the Individuals with Disabilities Education Act (IDEA) eligibility alone, rather than the combination of IDEA eligibility, private insurance mandates, and changes made by the Affordable Care Act to mandated autism benefits. *See id.* Grant and Nozyce's description is primarily a qualitative discussion of the changes' impact, rather than a quantitative analysis of what proportion of children with autism are likely to be affected by certain changes to medical and educational benefits. *See id.*

⁸ *See generally* Mitchell L. Yell et al., *Developing Legally Correct and Educationally Appropriate Programs for Students with Autism Spectrum Disorders*, 18 FOCUS ON AUTISM & OTHER DEVELOPMENTAL DISABILITIES, 182, 185 (2003) (finding that individualized IEPs must "contain *measurable* annual goals and a description of the methods by which a student's progress toward his or her goals are measured. . . . [And] IEP teams must regularly inform parents of students in special education of their child's progress toward his or her annual goals and the extent to which this progress is sufficient to enable the child to achieve these goals").

coupling refers to the number of steps and interpretations that stand between the diagnosis and access to the entitlement. Tightly coupled diagnosis-entitlement pairs include insurance coverage of medical treatment, where the diagnosis almost always results in eligibility for treatments provided by certified practitioners.⁹ Loosely coupled diagnosis-entitlement pairs are mainly related to educational benefits, where a diagnosis *helps* a child qualify for special education services, but many other factors play a role in determining eligibility, including: whether the child's impairment is deemed educational; which services are covered in his individualized education plan (IEP); and then how closely the IEP is followed once decided upon.¹⁰ This shows that while the media depicts a straightforward link between access to a diagnosis and access to medical and educational entitlements, the reality is often much different. It is important to investigate the factors that determine how DSM diagnosis translates into service access.

Drawing a focus to the factors between an individual's DSM diagnosis and their later access to entitlements, this Article addresses a single question: will the DSM-5 changes endanger services for persons with autism or Asperger's? To ground this question in concrete policy illustrations, the Article focuses on the impact of DSM-5 changes on two DSM-linked entitlements: state mandated autism insurance benefits and special education benefits. Of note, the Article finds that criteria for who can access DSM entitlements varies between states, and thus raises questions about how the DSM changes impact not only *general access* to autism services among U.S. children and adolescents, but also how the DSM changes are impacted by *state variations* in access to these services.

Part I addresses the case's broader relevance to understanding DSM-linked entitlements. First, this Part considers a focus on autism spectrum disorders. Second, this Part considers a focus on DSM-linked entitlements that vary between states as opposed to entitlements where DSM changes affect all states in a more uniform manner. After discussing this disease case study and focusing on state-by-state variations, Part II argues that in order to understand the impact of DSM-5 changes, we need to understand the entitlement landscape for autism in the years prior to

⁹ See Lucy A. Bilaver & Neil Jordan, *Impact of State Mental Health Parity Laws on Access to Autism Services*, 64 PSYCHIATRIC SERVICES 967, 967–69 (2013). Bilaver and Jordan examine state mental health parity laws with respect to autism, finding that seventeen states have “strict parity laws” (indicating that the law requires fairly similar mental and physical illness coverage) that either explicitly or implicitly include autism and many states that either lacked strict parity legislation or were unclear about whether autism was covered. *Id.* Their analysis suggests that many states have strong protections for medical insurance coverage for autism. *See id.* at 967. In addition to state mental health parity laws that may explicitly mention autism, the 2008 federal mental health parity legislation instructs insurers to define “mental health conditions” eligible for coverage to “be consistent with generally recognized independent standards of current medical practice for example, the most current version of the . . . DSM.” Parity in Mental Health and Substance Use Disorder Benefits, 29 C.F.R. 2590.712(a) (2014).

¹⁰ See generally Yell et al., *supra* note 8, at 184 (discussing education performance and IEPs).

DSM-5's publication in 2013. Therefore, Part II outlines the policy landscape of insurance and educational entitlements for autism in the years preceding the DSM-5. Drawing on novel empirical analysis, this Part shows the importance of viewing these two types of entitlements as *interactive complements* rather than *siloed services* by illustrating how more generous insurance coverage for autism services leads to more rapid uptake of special education autism services. Understanding this interplay is important because it highlights two routes through which DSM changes can impact policy. The first is a direct route where a DSM change impacts a policy like insurance coverage that is explicitly tied to a DSM diagnosis. The second is an indirect route where a DSM change influences a policy like insurance coverage, which then impacts how many children seek special education treatment for autism. After Part II's analysis of the pre-DSM-5 policy landscape, Part III turns to the question: what impact might the DSM-5 changes have on services surrounding autism policy? Contrary to common fears that DSM changes would significantly endanger service access, this Part finds that the DSM-5 changes will also have some benefits for autism service access that have been overlooked. Concluding, the Article discusses the implications of the case for broader understandings of the various degrees of *coupling* between DSM diagnoses and service entitlements.

I. AUTISM AS AN ENTITLEMENTS CASE STUDY

To understand the strength of coupling between DSM diagnoses and service entitlements, it is important to focus on an identifiable disease case study and specific entitlements associated with that disease. This Part will use autism as a case study. But why focus on autism?

A. *Why Study Autism?*

Autism is an important case because the condition has sparked a cascade of changes to the landscape of medical and educational entitlements. The first step in the cascade was the sharp increase in autism's identified prevalence. In the 1970s and 1980s, when autism's prevalence was not systematically tracked and when researchers relied on methods such as surveys of doctors and parents to detect prevalence, the prevalence of autism was estimated at 20 per 10,000 children.¹¹ Since then, as organizations like the Centers for Disease Control (CDC) have started

¹¹ See generally Lorna Wing & Judith Gould, *Severe Impairments of Social Interaction and Associated Abnormalities in Children: Epidemiology and Classification*, 9 J. AUTISM & DEVELOPMENTAL DISORDERS 11, 24 (1979) (finding “[i]mpairments of reciprocal social interaction . . . in 21.2 of every 10,000 children aged under 15 in the area studied, of whom 4.9 had a history of typical autism”). For a discussion of how this study is used to inform the 20 per 10,000 children prevalence rate, see Lorna Wing & David Potter, *The Epidemiology of Autistic Spectrum Disorders: Is the Prevalence Rising?*, 8 MENTAL RETARDATION & DEVELOPMENTAL DISABILITIES RES. REVS. 151, 159 (2002) (noting that this study showed that the “age specific prevalence for all autistic spectrum disorders . . . was 20 per 10,000 children aged under 15 years”).

to measure prevalence in a more systematic way, the documented prevalence has risen from 1 in 150 eight-year-old children in 2002, to 1 in 110 in 2006, to 1 in 88 in 2008, and finally to 1 in 68 in 2010.¹² Though there is much debate about whether the rise in prevalence reflects a change in the real incidence of autism, or whether the main contributor is increased awareness around the diagnosis and other social contagion processes,¹³ the increase in prevalence has set a cascade of policy developments in motion, regardless of the increase's cause.

The second link in the autism policy cascade is that treatments developed to improve the functioning of children with autism are expensive, which, when combined with the high prevalence of autism, creates large cost pressures for many industries and for society as a whole. For instance, a group of therapies under the heading of Applied Behavior Analysis (ABA) are considered the most effective treatment for autism, yet can cost up to \$100,000 per year.¹⁴ And since behavioral

¹² *Facts About ASD*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/ncbddd/autism/facts.html>, archived at <http://perma.cc/TLW5-YAF5> (last updated Feb. 24, 2015).

¹³ See, e.g., GIL EYAL ET AL., *THE AUTISM MATRIX* 257 (2010) (“Our main point [is] that the recent rise in autism diagnoses represents not an epidemic, but a change in the institutional conditions under which we perceive and treat childhood disorders.”); Eric Fombonne, *The Prevalence of Autism*, 289 J. AM. MED. ASS’N 87, 87 (2003) (“[T]he authors suggest that these differences might reflect new diagnostic criteria for autism and increased availability of developmental disability services for children with autism in the 1990s.”); Marissa King & Peter Bearman, *Diagnostic Change and the Increased Prevalence of Autism*, 38 INT. J. EPIDEMIOLOGY 1224, 1224 (2009) (“The objective of this study [is] to determine the extent to which the increased prevalence of autism in California has been driven by changes in diagnostic practices, diagnostic substitution and diagnostic accretion.”); Ka-Yuet Liu et al., *Social Influence and the Autism Epidemic*, 115 AM. J. SOC. 1387, 1387 (2010) (“We eliminate competing explanations . . . and show that information diffusion simultaneously contributed to the increased prevalence, spatial clustering, and decreasing age of diagnosis.”); David Mandell & Luc Lecavalier, *Should We Believe the Centers for Disease Control and Prevention’s Autism Spectrum Disorder Prevalence Estimates?*, 18 AUTISM 482, 483 (2014) (“[L]ocal policies, resources and awareness may drive observed differences in prevalence.”); Craig J. Newschaffer et al., *The Epidemiology of Autism Spectrum Disorders*, 28 ANN. REV. PUB. HEALTH 235, 239 (2007) (“[T]he question of whether this historical increase can be fully accounted for by these and other changes in diagnosis and classification remains open to debate . . .”).

¹⁴ For a discussion of effectiveness, see generally Laurie A. Vismara & Sally J. Rogers, *Behavioral Treatments in Autism Spectrum Disorder: What Do We Know?*, 6 ANN. REV. CLINICAL PSYCHOL. 447, 447 (2010) (“[I]ntervention programs applying the scientific teaching principles of applied behavior analysis (ABA) have been identified as the treatment of choice.”). For a discussion of the cost of ABA, see generally Thomas Zane et al., *The Cost of Fad Treatments in Autism*, 5 J. EARLY & INTENSIVE BEHAV. INTERVENTION 44, 44 (2008) (“Two . . . fad treatments, Sensory Integration Therapy and Relationship Development Intervention are discussed in terms of data on effectiveness and cost of treatment.”). See also James N. Boudier et al., *Brief Report: Quantifying the Impact of Autism Coverage on Private Insurance Premiums*, 39 J. AUTISM & DEVELOPMENTAL DISORDERS 953, 953 (2009) (“Using Pennsylvania legislation as an example, which proposed covering services up to \$36,000 per

treatments straddle the line between medical and non-medical interventions, the treatments could fall into any one of the service sectors that provide treatment for autism, including: healthcare; special education; housing; or other social services for adults.¹⁵ The cost of treatment has raised questions about *which* social institutions are responsible for paying. Insurers argue that behavioral treatments are educational interventions that ought to be covered within school special education budgets, while, in contrast, schools argue as long as they provide evidence-based interventions that lead to meaningful educational benefits, they do not need to cover intensive behavioral treatments.¹⁶ In sum, autism's status as a *developmental* disorder that creates problems with both school and outside-of-school functioning leads to significant debates about not only *whether* children with the disorder should receive entitlements but also about *which institutional sector* should provide the bulk of these entitlements.

This conflict over which institutions should help pay for autism treatments has led to policy developments that make autism an interesting case study for analyzing links between DSM diagnoses and service entitlements. Autism advocacy groups such as *Autism Speaks* have become frustrated with private insurance companies rejecting coverage for intensive behavioral interventions such as ABA.¹⁷ As *Autism Votes*, the legislative action arm of *Autism Speaks* has stated: "many insurance companies continue to refuse coverage for [ABA], which is considered the standard of care for autism treatment, on the basis that it is 'experimental' or 'educational.'"¹⁸ To remedy this refusal, *Autism Speaks* is lobbying state legislatures to pass autism insurance mandates that require private insurers to cover autism treatments.¹⁹ Figure

year for individuals less than 21 years of age, this paper estimates potential premium increases.").

¹⁵ See generally Ariane V.S. Buescher et al., *Costs of Autism Spectrum Disorders in the United Kingdom and the United States*, 168 J. AM. MED. ASS'N PEDIATRICS 721, 721 (2014) ("The distribution of economic effect across many different service systems raises questions about coordination of services and sectors.").

¹⁶ See Catherine Nelson & Dixie Snow Huefner, *Young Children with Autism: Judicial Responses to the Lovaas and Discrete Trial Training Debates*, 26 J. EARLY INTERVENTION 1 (2003), for a review of litigation between parents and school districts about coverage of ABA and related therapies, such as the Lovaas method and TEACCH model. In reviewing the case outcomes, the Article notes that courts have usually deferred to the school districts but "required justification of IEP-based teaching methods as data based and calculated to address the individual needs of a child with autism." *Id.* at 16. Many cases have centered on the definition established in *Board of Education of the Hendrick Hudson School District v. Rowley*, which requires that IEPs provide meaningful benefit to a child, but does not obligate school districts to "maximize" a child's educational benefits. See 458 U.S. 176, 198–200 (1982). Many parents argue that intensive behavioral treatments are necessary to provide the child with a meaningful benefit.

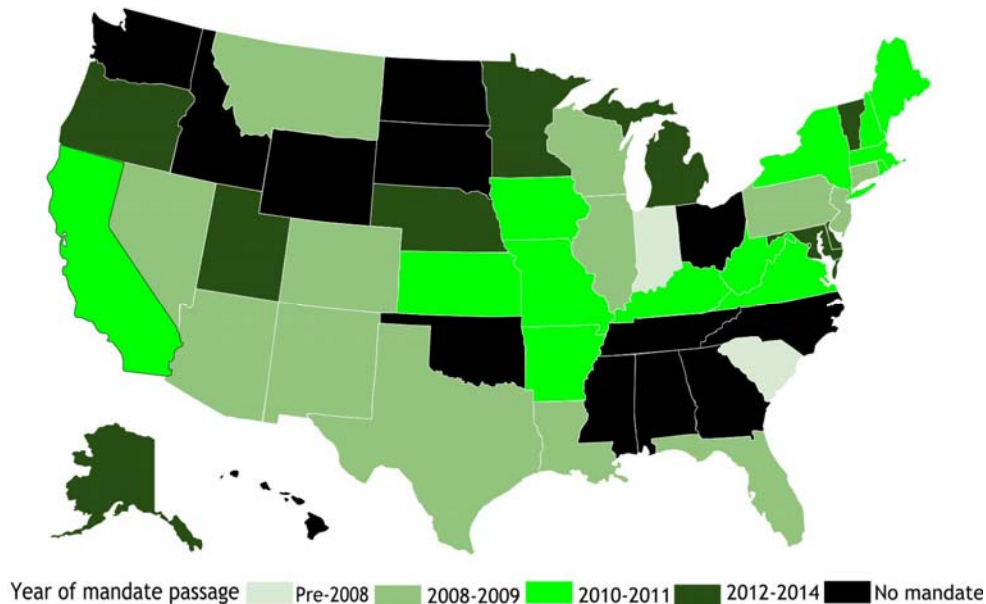
¹⁷ See *State Initiatives*, AUTISM SPEAKS, <http://www.autismspeaks.org/state-initiatives>, archived at <http://perma.cc/48S7-WDMA> (last visited Mar. 21, 2015).

¹⁸ *Id.*

¹⁹ See generally Rebecca A. Johnson et al., *US State Variation in Autism Insurance Mandates: Balancing Access and Fairness*, 18 AUTISM 803, 803–814 (2014) (exploring as a

1 outlines the passage of mandates by year up to October 2014. The passage of these mandates increases the importance of changes to the DSM category of autism. As shown later, all of the enacted mandates specify that a child must have a diagnosis of an autism spectrum disorder to qualify for the mandated treatment.²⁰ This makes autism an important case study for studying entitlements that are explicitly linked to a specific DSM diagnosis.

Figure 1. Mandate Passage by Year²¹



case study “the fact that only 30 out of 51 US states or territories passed mandates requiring private insurers to offer extensive coverage of autism behavioral therapies, creating variation for privately insured children living in different US states”); Susan Parish et al., *State Insurance Parity Legislation for Autism Services and Family Financial Burden*, 50 *INTELL. & DEVELOPMENTAL DISABILITIES* 190, 190–98 (2012) (examining “the association between states’ legislative mandates that private insurance cover autism services and the health care–related financial burden reported by families of children with autism”); *AUTISM SPEAKS*, *supra* note 17 (“Autism Speaks is working to change state insurance laws to require private health insurance policies to cover the diagnosis and treatment of autism spectrum disorders.”).

²⁰ See *infra* Part III.A.1.

²¹ This figure was created by the author with data from the following sources and was corroborated by checking the specified states’ legislative codes: *Insurance Coverage for Autism*, NAT’L CONFERENCE OF STATE LEGISLATURES (Aug. 2012), <http://www.ncsl.org/research/health/autism-and-insurance-coverage-state-laws.aspx>, archived at <http://perma.cc/FCL4-BL5H>; *AUTISM SPEAKS*, *supra* note 17; *infra* Table 3.

B. *Why Study Between-State Variation?*

As argued earlier, rather than assuming that changes to the DSM category of autism have a straightforward impact on service access, we should understand the factors that *connect* DSM changes and the access to services. Also, the autism case study reveals an important mediating factor: variation between states in autism-related policies. Accordingly, Parts II and III outline two sources of state-by-state variation that affect service access. First, states vary based on whether the state has passed a private insurance mandate for autism treatments and whether the mandated autism benefits were codified into the state's Essential Health Benefits (EHBs) through its choice of a benchmark plan under the Patient Protection and Affordable Care Act (ACA). Second, states vary in the ways they define eligibility for the special education category of autism. Before reviewing that policy landscape, it is worth exploring why state-by-state variation is important for those seeking to understand the link between DSM diagnoses and service entitlements.

First, is the obvious fact that state-by-state variation means that children who have the same DSM diagnosis but who live in different states are likely to receive different depths of services. This variation seems to require ethical justification, especially because, as Figure 1 illustrates, private insurance mandates do not seem to fall along clear liberal-conservative lines that might reflect ideological differences about the proper role of government in regulating healthcare.²² Likewise, the differences in special education categories for autism do not fall along clear ideological lines.²³ DSM changes affect the entire United States, but since these changes are mediated by state-level variation in DSM-associated entitlements, it is worth exploring how the DSM changes might have an uneven impact across states. The second factor that makes state-by-state variation interesting is that it gives us insight into *what* features of a state's laws and policy lead to variation in the impact that DSM changes have. Why have some states adopted autism-specific insurance benefits, thus magnifying the impact of any DSM changes and making those changes more politically controversial among the advocacy community, while other states have not passed policies singling out autism benefits? Advocacy organizations, like the *National Alliance on Mental Illness* (NAMI), focus on a broad range of mental illnesses, and thus attenuate the impact of any one DSM change. In contrast, a movement has emerged around *one specific* DSM diagnosis, autism, making any change to the autism category especially threatening to state-by-state legislation that singles out the autism category.

²² See Johnson et al., *supra* note 19, at 808 (finding a link between three ethical acceptable sources of variation for characteristics of a state's autism insurance coverage).

²³ See Jaclyn R. MacFarlane & Tomoe Kanaya, *What Does it Mean to be Autistic? Inter-state Variation in Special Education Criteria for Autism Services*, 18 J. CHILD & FAM. STUD. 662, 662–69 (2009), for documentation that there is state-by-state variation in special education autism criteria, though they do not investigate what features of a state might contribute to the variation. Further, MacFarlane and Kanaya's analysis does not argue that there are political or ideological reasons behind the different definitions. *Id.*

II. PRE DSM-5 LANDSCAPE OF INSURANCE AND EDUCATIONAL SERVICES

Part I outlined the features of autism that make it an important case study for the different degrees of coupling between DSM categories and service entitlements. These include debates over whether school districts or insurers are primarily responsible for funding these entitlements. Two additional changes are taking place within autism treatment. Successful state-level political mobilization is pressing private insurers to cover autism treatments, and the resulting mobilization is creating state-by-state variation in insurance and educational benefits. These features contribute to a complex U.S. autism service landscape, with advocates' legislative victories creating instability over time and variation between states' autism services. Therefore, before analyzing the impact of the DSM-5 changes in Part III, this section will focus on two specific DSM-associated entitlements that emerged in the decade leading up to the DSM-5 revisions: state-level autism-specific private insurance mandates and special education benefits for autism.

In outlining this policy landscape, it will be argued that rather than examining each entitlement in isolation, we should examine the way that changes to one entitlement impact the other entitlement.²⁴ Examining the interdependence of these two entitlements is important because it can help illustrate the multiple *routes* by which DSM changes impact service access. One route is by impacting the entitlement itself—for instance, a DSM change that *expands* a category by relaxing the criteria a potential patient needs to meet will allow more persons to receive a diagnosis and qualify for insurance coverage of associated treatment. Another route through which DSM changes can affect service access is by impacting access to one service that then impacts access to another entitlement. For example, increased use of reimbursed medical services for autism is helping children and families successfully argue for the inclusion of certain services in a child's special education IEP. Since others have examined the first route—DSM's impact on entitlements in isolation²⁵—my focus in this Article is on the second route: the DSM's impact on two sets of entitlements (medical and educational) given their interdependence. To explore this second route, we need to understand the interdependence between insurance and educational benefits for autism.

To do so, this section first asks, what historical factors led advocacy groups to press for disease-specific mandates? This question is important in understanding why advocacy groups focused on disease-specific mandates even after broader mental health parity legislation was passed. After reviewing the general reasons for why autism groups have pressed for mandates, the section will analyze why some

²⁴ For instance, many articles focus on either autism insurance benefits *or* special education services, without looking at the interplay between the two policies and how the DSM-5 might affect both. For an example of the former, see Parish et al., *supra* note 19, at 190. For an example of the latter, see Grant and Nozyce, *supra* note 7, at 586–87. For an article that discusses the interplay between medical and educational policies, but that fails to discuss the potential impact of DSM-5 changes, see generally Buescher et al., *supra* note 15, at 721–22.

²⁵ See, e.g., Grant & Nozyce, *supra* note 7, at 587.

states have passed mandates while others have not, which can help us understand features of a state that make it more likely to create entitlements with a close link to a DSM category. After understanding *why* the mandates are passed, the section then turns to *what effect* the mandates have had, and more specifically, what impact the passage of private insurance mandates has had on autism's special education entitlement landscape. In particular, autism advocates framed the mandates as a way to shift some of the costs of autism from publicly financed special education to private insurance. For instance, upon New York's passage of an autism insurance mandate, the President of *Autism Speaks* commented that the legislation would not only help relieve families of some of the costs of autism services, but would also relieve a portion of the taxpayers financing burden. The President stated: "This critical legislation will . . . save the taxpayers of this state an estimated \$13 million in special education, Medicaid and social service costs in the next six years."²⁶ Therefore, it is worth examining the extent to which mandated insurance coverage for autism and special education services under the autism category *substitute* for one another, with more generous private insurance coverage reducing pressure on special education service utilization, or whether the two seem to rise in tandem, with more generous private insurance coverage increasing rather than decreasing demand for autism special education services. Examining the relationship between these two entitlements can help explain how DSM changes influence an interdependent web of services rather than individual isolated services. And since families draw upon both medical and educational services to meet their treatment needs,²⁷ taking this interdependent perspective is a more accurate way of understanding the impact of DSM revisions on service access.

A. Insurance Benefits

1. Historical Factors Behind the Mandates' Passage

The decade leading up to the DSM-5 revisions featured two important policy developments that shaped the autism service landscape. The first was increasing levels of insurance parity between mental and physical illnesses.²⁸ When health insurance was first introduced in the 1930s, few private insurers covered hospitalization for mental illness, since psychiatric care had been traditionally

²⁶ Rick Karlin, *Autism Coverage Bill is Law*, CAPITOL CONFIDENTIAL (Nov. 1, 2011, 1:50 PM), <http://blog.timesunion.com/capitol/archives/85444/autism-coverage-bill-is-law/>, archived at <http://perma.cc/3BTK-KSE3>.

²⁷ See, e.g., Tara A. Lavelle et al., *Economic Burden of Childhood Autism Spectrum Disorders*, 133 PEDIATRICS e520, e525–27 (2014) (describing the high costs associated with children diagnosed with autism spectrum disorders).

²⁸ See Kirsten Beronio et al., *How the Affordable Care Act and Mental Health Parity and Addiction Equity Act Greatly Expand Coverage of Behavioral Health Care*, 41 J. BEHAV. HEALTH SERVS. & RES. 410, 410–19 (2014) (describing the growth of insurance coverage for mental health disorders after the enactment of the Affordable Care Act and Mental Health Parity and Addiction Equity Act).

delivered in a public, state-financed system.²⁹ At the time, most care for mental illness was long-term, institutional care, and plans were thus reluctant to cover the high cost of such intensive treatment. From the 1950s through early 1980s, as treatments for mental illness shifted away from institutional settings to various forms of outpatient care—psychotherapy, psychoanalysis, and medications such as the antipsychotic Thorazine that were developed in the 1950s and 1960s—private insurance plans began to include coverage for mental health treatment in their benefits package. But this treatment was often more limited, less available, and more liable to be cut than treatment for physical illnesses.³⁰

After viewing the distress caused by the restrictions on mental illness care, mental health advocates began a concentrated push in the 1990s for more parity in coverage between mental illness services and other types of medical care. Though the movement faced several setbacks, including a failed 1992 parity bill³¹ and the defeat of President Clinton's national health care reform³² that would have mandated certain mental health benefits,³³ Congress enacted the Mental Health Parity Act (MHPA) in 1996.³⁴ Support for the act reached across both sides of the political aisle: Republican Senator Pete Domenici and Democratic Senator Paul Wellstone were the co-sponsors of the act.³⁵ Yet despite having “parity” in the title, the act made only modest steps towards the true equalization of mental health care. The act did not mandate that employer-sponsored health plans *offer* mental health coverage; it only stipulated that if coverage *was* offered, the dollar limits needed to be equal to the dollar limits on other medical benefits.³⁶ Furthermore, the act did not impose any limitations on other restrictive aspects of mental health coverage, such as high deductibles, high copayments, limits on days or visits, and plans were exempted if the cost of complying with parity exceeded the original cost of coverage by over 1%.³⁷ In response to the passage of the federal parity act, thirty-four states enacted

²⁹ Steven S. Sharfstein & Anne M. Stoline, *Reform Issues for Insuring Mental Health Care*, 11 HEALTH AFF. 84, 85 (1992).

³⁰ *Id.* at 86.

³¹ Colleen L. Barry et al., *A Political History of Federal Mental Health and Addiction Insurance Parity*, 88 MILBANK Q. 404, 409 (2010).

³² *Id.*

³³ *Id.*

³⁴ Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1997, Pub. L. No. 104-204, §§ 701–702, 712, 2705, 110 Stat. 2874, 2944–50 (1996); Christopher Aaron Jones, Note, *Legislative “Subterfuge”?: Failing to Insure Persons with Mental Illness Under the Mental Health Parity Act and the Americans with Disabilities Act*, 50 VAND. L. REV. 753, 757 (1997).

³⁵ Barry et al., *supra* note 31, at 409. It is worth noting that the legislation was actually an amendment—Title VII-Parity in the Application of Certain Limits to Mental Health Benefits—added to a somewhat unrelated bill: the Department of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act. See Roland Sturm & Rosalie Liccardo Pacula, *State Mental Health Parity Laws: Cause or Consequence of Differences in Use?*, 18 HEALTH AFF. 182, 184 (1999).

³⁶ *Id.*

³⁷ *Id.*

their own mental health parity laws in 1997, some of which mirrored the federal legislation as a show of support, while others were more generous parity mandates targeted at less burdensome patient cost-sharing for mental health services, expanded visit limits, and more expansive inpatient and outpatient benefits.³⁸ Importantly, this first set of state parity mandates focused on expanding access to treatment for either all DSM diagnoses, which mandates referred to as “broad-based mental health disorders,” or all biologically-based or serious mental illnesses, which generally included “schizophrenia, schizoaffective disorder, psychotic disorders, bipolar disorder, major depression, panic disorders, and obsessive compulsive disorder.”³⁹ Furthermore, the mandates generally focused on *equal coverage* with physical illnesses rather than singling out specific treatments.⁴⁰ This stands in contrast to autism insurance mandates that focus on guaranteeing coverage of a specific disorder and a specific set of treatments, such as ABA. For instance, California’s autism mandate specifies that it applies to “pervasive developmental disorder or autism” and that the treatments covered include “applied behavior analysis and evidence-based behavior intervention programs”⁴¹

As Paul Wellstone, one of the Mental Health Parity Act’s sponsors, admitted, the MPHA was more symbolic than substantial, telling colleagues: “[W]e didn’t even get half a loaf, we just got crumbs but it’s a start.”⁴² In 2008, an expansion of the MPHA was enacted as part of President Bush’s 2008 economic bailout bill—the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 (MHPAE)—which targeted the areas of parity untouched by the original law.⁴³ MHPAE prohibits group health plans (including self-insured employers that offer mental health and substance abuse benefits) from imposing financial requirements, such as copayments, deductibles, out-of-pocket expenses, or treatment limitations, that are more burdensome than requirements applied to all medical and surgical benefits covered by the plan.⁴⁴

³⁸ The states’ mandates, due to restrictions under the Employee Retirement Income Security Act (ERISA) of 1973, do not apply to self-insured plans. Thomas C. Buchmueller et al., *Parity For Whom? Exemptions and the Extent of State Mental Health Parity Legislation*, 26 HEALTH AFF. w483, w483 (2007). As a result, many Americans with health coverage through a private employer are in plans that are not subject to state mandates. An analysis estimated that even though 45% of all private-sector employees with insurance lived in a state with a strong parity law, the ERISA self-insurance exemption halved the number of employees actually covered by these laws. *See id.* at w485–87.

³⁹ *State Mental Health Parity Laws*, NAT’L ALLIANCE ON MENTAL ILLNESS (July 2009), <http://www.nami.org/Template.cfm?Section=Parity1&Template=/ContentManagement/ContentDisplay.cfm&ContentID=45313>, archived at <http://perma.cc/6LF8-L2NR>.

⁴⁰ *Id.*

⁴¹ CAL. HEALTH & SAFETY CODE § 1374.73(a)(1), (c)(1) (West Supp. 2015).

⁴² Barry et al., *supra* note 31, at 410.

⁴³ *Id.* at 405.

⁴⁴ David L. Shern et al., *After Parity—What’s Next*, 28 HEALTH AFF. 660, 660 (2008).

The legislation was intended to address significant barriers to care faced by those with mental illness.⁴⁵ A survey conducted before the MHPAE was enacted found that 74% of workers with mental health benefits were subject to annual outpatient visit limits, 64% were subject to an inpatient visit limit, and 22% had higher cost sharing for mental health benefits than for general medical benefits.⁴⁶ Addressing these shortcomings, the MHPAE outlined more stringent requirements for what constitutes “parity.”⁴⁷ The legislation overcame significant resistance by businesses, insurance companies, and some Republican legislators who argued that the legislation would drive up health insurance premiums, create adverse selection where plans offering more comprehensive benefits would attract people more likely to use those comprehensive services, and moral hazard where the presence of a mental health benefit would make patients enrolled in the plan more likely to use it.⁴⁸ However, as an increasing body of academic research emerged showing that parity laws had a negligible impact on insurance premiums, opposition to parity laws from employers and insurance groups became less pronounced.⁴⁹

While the MHPA was characterized as a symbolic set of “crumbs,” mental health advocates viewed the MHPAE as a substantive step towards more equitable treatment for mental illness sufferers. Supporters of the bill viewed it as an important milestone in the quest for “civil rights” for the mentally ill, the effort to end

⁴⁵ See Barry et al., *supra* note 31, at 405 (discussing problems before the legislation such as how “coverage for behavioral health care often required a higher level of cost sharing (e.g., coinsurance of 50 percent compared with 20 percent for outpatient medical services) and special service limits (e.g., twenty outpatient visits and thirty inpatient days per year”).

⁴⁶ Colleen L. Barry et al., *Design Of Mental Health Benefits: Still Unequal After All These Years*, 22 HEALTH AFF. 127, 129 (2003).

⁴⁷ See Kevin Fiscella, *Health Care Reform and Equity: Promise, Pitfalls, and Prescriptions*, 9 ANNALS FAM. MED. 78, 80 (2011) (discussing how the parity provisions in the MHPAE improved upon disparities in cost between mental and physical illness treatments, as well as measures such as prohibiting differences in allowable length of hospital days for mental versus physical illnesses).

⁴⁸ See Barry et al., *supra* note 31, at 412–22.

⁴⁹ *Id.* at 412; see also Robert Pear, *House Approves Bill on Mental Health Parity*, N.Y. TIMES (Mar. 6, 2008), <http://www.nytimes.com/2008/03/06/washington/06health.html>, archived at <http://perma.cc/X69B-79F4> (“Insurers and employers supported the Senate bill. Many opposed the House version, saying it would drive up costs.”). In addition, President Bush’s creation of the President’s New Freedom Commission on Mental Health in 2002, which reported that the mental health system was in “shambles,” lent a degree of presidential support to mental health parity legislation. John K. Iglehart, *The Mental Health Maze and the Call for Transformation*, 350 NEW ENG. J. MED. 507, 507 (2004). While various states had mental health parity laws more generous than even the 2008 federal legislation, by enacting the law at the federal level, the act specifically targeted plans exempt from state-level mandates, such as self-insured plans typically adopted by large corporations. Barry et al., *supra* note 31, at 410–11. Though the legislation still left small employer and individual plans exempt, it applies to large plans, self-insured employers, Medicare Advantage, Medicaid managed care, and SCHIP. *Id.* at 407. The bill received more support from Democrats than from Republicans: “The vote was 268 to 148, with 47 Republicans joining 221 Democrats in support of the measure.” Pear, *supra*.

insurance discrimination, and the move to reduce the stigma surrounding mental illness.⁵⁰ The bill's supporters included prominent Congressional advocates such as Democratic representative Patrick Kennedy who suffers from depression and Republican representative Jim Ramstad who suffers from alcoholism.⁵¹

But, even the MHPAE left gaps in mental health coverage. For example, before the ACA, a health plan was not required to *offer* mental health benefits. Even after the ACA, a plan could still exercise a significant degree of control over which treatments are deemed “medically necessary” and therefore covered versus which treatments are deemed “experimental.”⁵² As a result, autism advocates have built on the language of mental health parity in advocating for state-level legislation that more explicitly requires coverage for autism treatment in insurance plans.⁵³ Despite that fact that some state-level mental health parity laws define mental illness as *any* condition listed in the DSM, a definition that includes autism,⁵⁴ autism advocates have sought more generous coverage than the parity guaranteed by federal and state legislation. For instance, under some mental illness parity legislation, insurers could still argue that treatments like ABA and other intensive behavioral interventions were “experimental” or “not medically necessary.”⁵⁵ Therefore, many of the mandates focused not only on guaranteeing *general* autism treatment but also guaranteeing a specific set of interventions, such as ABA. Indeed, 86.8% of the mandates passed between 2001 and October 2014 explicitly require coverage of ABA.⁵⁶ As such, the state-level mandates go beyond existing parity legislation to single out a specific disease, autism, and a specific intensive set of treatments for that disease, ABA therapies, for mandated coverage.

Part III, will discuss how these state-level mandates interact with the ACA's attempts to mandate general categories of treatment through essential health benefits. For now, it is worth noting that the passage of these mandates means that the DSM-5 changes to the autism category provoked particular concern about

⁵⁰ Barry et al., *supra* note 31, at 405, 409; Pear, *supra* note 49.

⁵¹ Barry et al., *supra* note 31, at 405.

⁵² For a discussion of insurers deeming autism treatment experimental or not medically necessary, see Laura C. Hoffman, *Ensuring Access to Health Care for the Autistic Child: More Is Needed than Federal Health Care Reform*, 41 SW. U. L. REV. 435, 452–55 (2012).

⁵³ See AUTISM SPEAKS, *supra* note 17.

⁵⁴ *State Insurance Mandates for Autism Spectrum Disorder*, AM. SPEECH-LANGUAGE-HEARING ASS'N, <http://www.asha.org/Advocacy/state/States-Mental-Health-Parity-Autism/>, archived at <http://perma.cc/A3NL-4M7J> (last visited Mar. 21, 2015) (listing Hawaii, Mississippi, North Carolina, North Dakota, Ohio, and Washington as states with mental health parity laws that may include autism spectrum disorder as a covered mental illness).

⁵⁵ Tom Reinke, *States Increasingly Mandate Special Autism Services*, MANAGED CARE (Aug. 2008), <http://www.managedcaremag.com/archives/0808/0808.autism.html>, archived at <http://perma.cc/CN3L-6PE7>.

⁵⁶ This figure and subsequent analyses are conducted from a database created by the author of mandates by state and features of those mandates. See Rebecca Johnson, Appendix I: Mandate Database ABA Yesorno (2014) (on file with Utah Law Review), archived at <http://perma.cc/2PNR-H7FQ>.

service loss given that the mandates explicitly singled out autism, Asperger's, and PDD-NOS as eligible diagnoses. On a television news show discussing the DSM-5 autism revisions, the news anchors posed the question: "[W]hen they change the definition, the symptoms for kids who were previously on the spectrum won't change, they will still have their same symptoms of anti-social behavior, or whatever it is; however, they won't be able to get coverage?"⁵⁷ Jodi Bouer, a lawyer who specializes in insurance litigation to help families, responded that the changes threatened services guaranteed by mandates:

They won't be able to get coverage, because the state mandates basically lay out the diagnoses that require coverage, and within the scope of those mandates, typically, it's autism, Asperger's, PDD-NOS. PDD-NOS and Asperger's is no longer going to exist. A large—or a portion of the children who have those symptoms, don't have social communication disorders and repetitive behaviors. They are no longer going to be considered autistic, so the statutes are not going to protect them anymore.⁵⁸

Therefore, the fact that advocates had pressed for policies singling out autism in mandates made fears about service loss with DSM-5 changes especially acute. Especially since these entitlements are tightly coupled with the broader DSM category.

2. *State Level Factors Behind Mandates' Passage*

Autism advocacy groups have been highly successful in passing the state-level mandates. As Figure 1 illustrates, as of October 2014, thirty-eight states and territories have passed autism insurance legislation. Yet as the figure also illustrates, other states still have not yet passed mandates. In addition, the states that *have* passed mandates did so at varying speeds. Some states passed a mandate in 2008, while others passing a mandate in 2011, despite the fact that autism advocacy organizations were exerting high pressure on state legislatures throughout this period. And since the passage of the mandate is an important DSM-linked entitlement, what explains why some states either did not pass a mandate or were slow to do so? This question is important for understanding DSM-linked entitlements because it helps explain why some states pass mandates, which create a stronger diagnosis-entitlement link for autism, while other states fail to pass mandates, and thus create a weaker diagnosis-entitlement link.

A previous analysis studied features of a state that predict the passage of a mandate between the years 2005 and 2012, a period in which thirty U.S. states and

⁵⁷ *Transcript of Redefinition of Autism on FOX & Friends*, ELIZABETH BIRT CTR. FOR AUTISM LAW & ADVOCACY, <http://www.ebcala.org/areas-of-law/transcript-of-redefinition-of-autism-on-fox-friends/>, archived at <http://perma.cc/ZQ8J-UACY> (last visited Mar. 21, 2015).

⁵⁸ *Id.*

mandates passed autism insurance legislation.⁵⁹ Analyzing data on state-level features that predict the passage of an insurance mandate shows that states that have a stronger existing autism service infrastructure—measured by the density of pediatricians per child and higher levels of *identified* autism prevalence, which is related to the strength of services to detect the disorder—are significantly more likely to pass a mandate than states with a weaker service infrastructure. This notion is called the “cumulative advantage” outcome of a mandate passage.⁶⁰ Since mandates help alleviate family financial burdens for autism treatment,⁶¹ and also are likely to spark the development of autism services within a state,⁶² the *cumulative advantage* outcome means that states with stronger existing autism services are more likely to pass mandates that, by creating a close DSM-diagnosis-service entitlement link, further bolster service access for children living within that state.

B. Special Education Benefits

While the insurance benefits that the mandates guarantee are an important part of autism treatment, autism’s status as a *neurodevelopmental* condition⁶³ with onset in early childhood means that special education benefits are an important service provided by schools.⁶⁴ The Education for All Handicapped Children Act of 1975

⁵⁹ See Johnson et al., *supra* note 19, at 805 (discussing “why some US states have passed autism insurance mandates and asking whether these reasons for a mandate’s passage make the variation the mandates create ethically acceptable”).

⁶⁰ *Id.* at 809.

⁶¹ Parish et al., *supra* note 19, at 194.

⁶² See generally A. Celeste Harvey et al., *Funding of Applied Behavior Analysis Services: Current Status and Growing Opportunities*, 7 PSYCHOL. SERVICES 202, 208 (2010), for background on various state’s involvement with autism services, stating that “[t]he demand for ABA services has grown significantly in the past decade as the prevalence of autism has increased dramatically.” The effect of mandate passage on autism service development within a state has not been studied directly. However, there are indications that ABA practitioners and other service providers closely monitor the progress of autism insurance legislation. For instance, the authors discuss funding streams for ABA and mention Autism Speaks’ successful efforts at passing private insurance mandates. *Id.* at 202–03, 208. The authors argue that many of the mandates in effect in 2009 did not explicitly require coverage of ABA. *Id.* at 208. However, as my analysis shows, since then, nearly all of the mandates (86.8%) appear to require ABA. Therefore, we can imagine the successful passage of mandates requiring private insurance coverage of ABA to provide financial incentives for more ABA practitioners, clinics, and service infrastructure surrounding the diagnosis.

⁶³ “[N]eurodevelopmental disorders are a group of conditions with onset in the developmental period. The disorders typically manifest early in development, often before the child enters grade school, and are characterized by developmental deficits that produce impairments of personal, social, academic, or occupational functioning.” AM. PSYCHIATRIC ASS’N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 31 (5th ed. 2013) [hereinafter AM. PSYCHIATRIC ASS’N, DSM-5].

⁶⁴ See, e.g., Michael Siller et al., *Longitudinal Change in the Use of Services in Autism Spectrum Disorder: Understanding the Role of Child Characteristics, Family Demographics, and Parent Cognitions*, 18 AUTISM 433, 442–44 (2014) (discussing how

guarantees that each child has a right to a “free appropriate public education,” and instructs evaluation committees within schools to use diagnostic criteria for disability categories that are outlined in the Code of Federal Regulations (CFR).⁶⁵ Autism was first added as a distinct disability category when the Act was reauthorized in 1990, under the new name of the Individuals with Disabilities Education Act (IDEA), with implementation of the first autism category required in 1992.⁶⁶ Since its addition, there have been large yearly increases in the percentage of children seeking services under the autism IDEA category. Utilization rates are reported by state, and one study, focusing on Wisconsin, documented an increase from 4.9 cases per 1,000 children in 2002 to 9.0 cases per 1,000 children in 2008.⁶⁷ The present analysis, examining data from all fifty U.S. states and District of Columbia from the years 2006 to 2010, documents that every state, except Iowa, exhibited an increase in autism special education utilization for the autism category.⁶⁸ The average change was 2.9 additional cases per 1,000 children, with Maine exhibiting the largest increase with an increase from 11.5 cases per 1,000 children in 2006 to 18.5 cases per 1,000 children in 2010.⁶⁹

What explains this increase in utilization of special education services for autism? Furthermore, what explains state-by-state variations in this rate of increase? Addressing these questions is important for understanding links between medical and educational DSM-linked entitlements. One answer, which was used as a policy rationale for the passage of insurance mandates, was that the mandates would *substitute* for special education services—the passage of a private insurance mandate would decrease special education utilization of and expenditures on autism services.⁷⁰ This answer suggests that special education and medical services for

children receive an average of 15.5 hours/week of school-based services, noting that these services are utilized more highly by African-American and Hispanic children as compared to Caucasian and Asian children, and highlighting the important role of publicly-funded special education in service provision for underserved minorities).

⁶⁵ Education for All Handicapped Children Act of 1975, Pub. L. No. 94-142, § 3(c), 89 Stat. 773, 775 (codified at 20 U.S.C. § 1400 (2012)).

⁶⁶ Education of the Handicapped Act Amendments of 1990, Pub. L. No. 101-476, §§ 101(a), 901(a), 104 Stat. 1103, 1103, 1141–51 (codified as amended in scattered sections of 20 U.S.C. (2012)).

⁶⁷ Matthew J. Maenner & Maureen S. Durkin, *Trends in the Prevalence of Autism on the Basis of Special Education Data*, 126 PEDIATRICS e1018, e1020 (2010).

⁶⁸ See *Historical State-Level IDEA Data Files*, TECHNICAL ASSISTANCE & DISSEMINATION NETWORK, <http://tadnet.public.tadnet.org/pages/712>, archived at <http://perma.cc/W7PU-RNK4> (last visited Mar. 21 2015).

⁶⁹ *Id.*; See Rebecca Johnson, Appendix II: Change in IDEA Prevalence of Autism (2014) (on file with Utah Law Review), archived at <http://perma.cc/7TLK-QRPZ>.

⁷⁰ See, e.g., Laura Shumaker, *Renewal of Autism Insurance Mandate Clears State Senate*, SFGATE (May 16, 2013, 4:55 PM), <http://blog.sfgate.com/lshumaker/2013/05/16/renewal-of-autism-insurance-mandate-clears-state-senate/>, archived at <http://perma.cc/R4XV-63DA> (reporting that the California State Senate passed legislation “requiring health insurance companies to provide coverage” for autism treatment).

autism are *interdependent*, and that better insurance coverage of autism treatment decreases the uptake of special education-funded treatment for autism. In contrast, a different view of the policies' interdependency is if they are *complements*. That is, better insurance coverage of autism treatment increases the uptake of special education-funded treatments. Addressing this debate, this section turns to analyzing whether a state's passage of a mandate leads to a decrease in special education autism utilization, slower growth in utilization, or higher growth in utilization compared to states that do not pass mandates. This analysis, as well as the descriptive information outlined in the Article's tables and figures, uses STATA version 12.1 (2011).⁷¹

1. Data⁷²

The dependent variable in my regression was the utilization rates for the autism special education category, separated by state. Estimates of the number of children receiving special education services for autism are derived from the Individual with Disabilities Education Act (IDEA) child count data, which provides yearly counts of special education services for 2006 through 2010.⁷³ For children with multiple diagnoses, the data classify the child according to the child's primary diagnosis.

The main independent variable of interest was the presence or absence of a private insurance mandate in a state. Yet other features of a state might affect the rate of special education autism utilization, so the regression includes several other state-level factors as independent variables. First, I used a state's median income measured by the U.S. Census Bureau.⁷⁴ Second, to examine whether some states are particularly likely to pass mandates regardless of what the mandates actually cover, the analysis includes a variable for the total number of other insurance mandates that a state has.⁷⁵ Third, to measure a state's political affiliation, a composite variable for each state that examined the state house majority affiliation, state senate majority affiliation, and governor's political affiliation, giving each political area a score of

⁷¹ StataCorp, *Stata Statistical Software: Release 12.1* (2011).

⁷² The data the author used to run the regressions in the sections that follow is digitally archived on the Utah Law Review website. See Rebecca Johnson, Appendix III: Autism Regression Data (2014) (on file with Utah Law Review), *archived at* <http://perma.cc/E43Z-6PV4>. The data is organized so that each row corresponds to a specific state and year. For example, Alabama has a 2005 year in row 2, a 2006 year in row 3, a 2007 year in row 4, and so forth.

⁷³ See *Historical State-Level IDEA Data Files*, *supra* note 68.

⁷⁴ AMANDA NOSS, U.S. DEP'T OF COMMERCE, U.S. CENSUS BUREAU, HOUSEHOLD INCOME: 2013: AMERICAN COMMUNITY SURVEY BRIEFS 3 tbl.1 (2014), *available at* <http://www.census.gov/content/dam/Census/library/publications/2014/acs/acsbr13-02.pdf>, *archived at* <http://perma.cc/P8V8-8HP2>.

⁷⁵ VICTORIA CRAIG BUNCE & JP WIESKE, COUNCIL FOR AFFORDABLE HEALTH INS., HEALTH INSURANCE MANDATES IN THE STATES 2010, at 3 (2010), *available at* http://www.cahi.org/cahi_contents/resources/pdf/MandatesintheStates2010ExecSummary.pdf, *archived at* <http://perma.cc/N5AY-JMH2>.

either 0 = Democrat, 1 = independent, or 2 = Republican was created.⁷⁶ The composite variable ranged from 0 (most liberal, all affiliations were Democrat) to 6 (most conservative, all affiliations were Republican). Fourth, because self-insured insurance plans are exempt from following the mandates, data from the 2010 Medical Expenditures Panel Survey (MEPS) was used to measure the percentage of exempt plans.⁷⁷ Finally, because the rate of special education autism utilization could be affected by the criteria each state uses to determine whether a child qualifies for an autism diagnosis, a variable was included measuring whether the state was “generous” in allowing persons to access the autism category, which meant that the state explicitly includes Asperger’s and PDD-NOS in their autism disability criteria (twenty states or territories) or “not generous” if it only specified that persons with autism meet the criteria (thirty-one states or territories).⁷⁸ Descriptive statistics are summarized in Table 1.

2. Model Specification

The dependent variable in the model looks at the rate of special education utilization under the autism category (measured as number of children per 1,000) and examines the utilization by year. Likewise, the main independent variable of interest in the model examines not only *that* a state passes a mandate but also *which year* it passes a mandate, and then looks at how the passage of a mandate in that year affects special education utilization in subsequent years. The model, called a difference-in-differences approach (DD), exploits two sources of variation to examine which factors affect rates of special education utilization. First is variation *between* states—comparing, for example, the rates of special education utilization in states that pass a mandate versus those that do not. Second is variation *within* a state over time—so, for example, if California passes an insurance mandate in 2011, the model compares what happens to California’s special education utilization rates *after* it passes a mandate compared to *before* it passes a mandate. The linear regression model is specified as follows, with special education utilization within a specific state, in a specific year, for the autism category as the dependent variable and with i = state and t = year. The fixed effects control variables for state and year control for time-invariant characteristics of a state that affect special education rates

⁷⁶ *2011 State and Legislative Partisan Composition*, NAT’L CONFERENCE OF STATE LEGISLATURES (Jan. 31, 2011), http://www.ncsl.org/documents/statevote/LegisControl_2011.pdf, archived at <http://perma.cc/49C3-ZC45>.

⁷⁷ *Data Overview*, AGENCY FOR HEALTHCARE RESEARCH & QUALITY (Aug. 26, 2009), http://meps.ahrq.gov/mepsweb/data_stats/data_overview.jsp, archived at <http://perma.cc/K45J-3FJ2>. The data used was from the 2010 iteration of MEPS for the following item: “Percent of private-sector establishments that offer health insurance that self-insure at least one plan by firm size and State.” *Percent of private-sector establishments*, AGENCY FOR HEALTHCARE RES. & QUALITY (2010), http://meps.ahrq.gov/mepsweb/data_stats/summ_tables/insr/state/series_2/2010/tia2a.htm, archived at <http://perma.cc/5AFJ-BBH2>.

⁷⁸ MacFarlane & Kanaya, *supra* note 23, at 666 tbl.3.

and national trends that might affect general special education rates but that do not affect state-by-state variation in these rates:

$$\begin{aligned} \text{autism special education utilization}_{it} = & \beta_1 * \text{Mandate}_{it} + \beta_2 * \text{median} \\ & \text{income}_{it} + \beta_3 * \text{percent ERISA exemptions}_{it} + \beta_4 * \text{total state mandates}_{it} \\ & + d_5 * \text{state political affiliation}_{it} + i_6 * \text{special education criteria generosity}_{it} \\ & + Y_i + \theta_t + \varepsilon_{it} \quad (1).^{79} \end{aligned}$$

3. Results⁸⁰

Table 2 shows the results of the model. The presence of an autism insurance mandate significantly predicts differential increases in autism special education utilization in states that pass a mandate compared to states that do not. The only other variable that significantly predicted differences in special education utilization was the percent of private insurers exempt from the mandate's requirement under ERISA, with an increase in the percent of exempt insurers in a state associated with lower growth of autism special education utilization.

Second, although special education utilization in the autism category increased in most states from the years 2005 to 2010, states that passed a mandate showed a significantly greater increase in special education utilization in the years following the mandate's passage compared to states without a mandate. Furthermore, among states with a mandate, states where a higher percentage of private insurers were required to follow the mandate and cover autism services showed greater increases in special education utilization than states where fewer insurers were required to follow the mandate and cover autism services. In other words, the greater the extent that insurance plans in a state were required to follow its autism coverage mandate, the greater the state's increase in autism special education utilization.

4. Implications of the Findings for Understanding DSM Diagnosis-Entitlement Coupling

Despite the framing of mandates as a way to shift some of the costs of autism from publicly financed special education to private insurance, the results question whether the mandates achieve this result. Instead, the results suggest a more rapid increase in special education service utilization for states that mandate private insurance coverage compared to states that do not mandate such coverage. This lends support to viewing DSM-linked entitlements as an interdependent web, rather than

⁷⁹ Rebecca Johnson, Appendix IV: Regression STATA Do File (2014) (on file with Utah Law Review), *archived at* <http://perma.cc/CK79-PNBW>; Rebecca Johnson, Appendix V: CSV file of Data for Regression (2014) (on file with Utah Law Review), *archived at* <http://perma.cc/3MVF-LTKW>.

⁸⁰ The print out of the results from the regression model are digitally archived on the Utah Law Review website as Appendix VI. See Rebecca Johnson, Appendix VI: Regression STATA Output (2014) (on file with Utah Law Review), *archived at* <http://perma.cc/3FU8-Z4YH>.

independent, siloed services. In particular, the findings show that the DSM category of autism impacts services through multiple routes. First it has an effect through the passage of private insurance mandates that explicitly single out autism for mandated treatment. Second, a state's passage of a private insurance mandate for autism leads to a faster rate of increase in utilization of special education autism services. As a result, *changes* to DSM categories can threaten service access through each of these routes.

Before moving from outlining the pre DSM-5 policy landscape to focusing on how this landscape might change in the wake of the DSM-5, it is important to note limitations of the interdependency analysis. First it is important to note that the data sources measured special education *utilization* rather than special education *expenditures*, with the latter data not systematically available. The passage of a mandate in a state could increase special education utilization while decreasing per pupil expenditures. Data on special education expenditures during the 1999/2000 school year found that 24% of the special education expenditures for autism go to "related service providers,"⁸¹ which include speech/language specialists, physical/occupational therapists, vision specialists, psychologists, social workers, and personal health aides. Some state mandates explicitly require insurers to cover services by these providers; for example, the Arkansas insurance mandate defines covered therapeutic care to include "services provided by licensed speech therapists, occupational therapists, or physical therapists."⁸² Therefore, it is feasible that if mandates reduce expenditures on this component of special education services, mandates may reduce overall special education expenditures on autism while nevertheless increasing the *number* of children receiving *some* autism special education services. Future research should explore these possibilities. For now, it is worth noting that utilization of the two DSM-linked entitlements sharply increased in the years preceding the DSM-5 revisions, and that an increase in uptake of medical entitlements leads to a faster increase in the use of special education entitlements. This shows how changes that affect the use of medical services for autism will also impact the use of special education services.

III. IMPACT OF THE DSM-5 CHANGES ON MEDICAL AND EDUCATIONAL ENTITLEMENTS

Now that this Article has outlined the pre DSM-5 policy landscape and, in particular, the interplay between increased private insurance coverage of autism services and an increasing rate of special education service use for the autism category, this section turns to the potential impacts of the DSM-5 revisions to the autism category. The DSM-5 collapsed four DSM-IV categories—autistic disorder,

⁸¹ JAY G. CHAMBERS ET AL., SPECIAL EDUC. EXPENDITURE PROJECT, AM. INSTS. FOR RESEARCH IN THE BEHAVIORAL SCIS., TOTAL EXPENDITURES FOR STUDENTS WITH DISABILITIES, 1999-2000: SPENDING VARIATION BY DISABILITY 30 app. C (2003), *available at* <http://files.eric.ed.gov/fulltext/ED481398.pdf>, *archived at* <http://perma.cc/G37B-8HFV>.

⁸² ARK. CODE ANN. § 23-99-418(a)(13) (2014).

Asperger's disorder, childhood integrative disorder, and pervasive developmental disorder not otherwise specified (PDD-NOS)—into a combined autism category, and also included severity level specifiers indicating how much support the child needs.⁸³ The DSM-5 also contains a new category, social (pragmatic) communication disorder (SCD), that is aimed at diagnosing children who exhibit impairments in social communication that are similar to those of children with autism but who lack children with autism's repetitive and restricted behavior.⁸⁴ Since details of how SCD will interact with autism policies remain unclear given the disorder's newness, the present section will focus on how the collapse of the separate neurodevelopmental diagnoses of Asperger's, PDD-NOS, and autistic disorder into a single autism spectrum category will impact service access.

As discussed, the changes sparked fears about service endangerment, with leading media outlets—including *The New York Times*; *Reuter's Health*; *The Chicago Tribune*; and *The Washington Post*—noting that the combined category might endanger access to services for some subset of patients who met the DSM-IV-TR definitions of autism, Asperger's, or PDD-NOS.⁸⁵ This section will address whether these fears about service endangerment are warranted. As Part II emphasized, we must think about how DSM changes impact an interdependent ecology of services rather than separate, *siloe*d services. With this approach in mind, the present section focuses on how the DSM-5 changes interact with three policy categories: private insurance mandates for autism services; the ACA's essential health benefits that affect whether a mandate's guarantees will be codified in state regulations or undermined by the ACA; and finally, state variation in special education criteria for autism. The section begins by looking at two ways in which the DSM changes may negatively impact access to autism services—an analysis that shows that media fears about service endangerment *are* grounded in empirical

⁸³ AM. PSYCHIATRIC ASS'N, HIGHLIGHTS OF CHANGES FROM DSM-IV-TR TO DSM-5, at 1–2 (2013), *available at* <http://www.dsm5.org/Documents/changes%20from%20dsm-iv-tr%20to%20dsm-5.pdf>, *archived at* <http://perma.cc/XXD6-BTJ8>.

⁸⁴ *Id.* at 1. *See generally* Lauren B. Swineford et al., *Social (Pragmatic) Communication Disorder: A Research Review of this New DSM-5 Diagnostic Category*, 6 J. NEURODEVELOPMENTAL DISORDERS 41 (2014) (explaining the history behind SCD and evaluating the decision to include the disorder in the DSM-5 manual).

⁸⁵ *See, e.g.*, Carey, *supra* note 3; Wendy Donahue, *Autism Diagnostic Changes Shuffle the Puzzle*, CHI. TRIB. (July 2, 2014), http://articles.chicagotribune.com/2014-07-02/health/sc-health-0625-autism-kids-20140702_1_pdd-nos-developmental-disorders-autism-rates, *archived at* <http://perma.cc/YAH9-M9F3>; Lena H. Sun, *Psychiatry's Revamped Guidebook Fuels Debate*, WASH. POST, May 17, 2013, at A1. Despite the fact that the DSM-5 changes would also collapse childhood disintegrative disorder (CDD) into the combined autism category, most articles focused on PDD-NOS and especially Asperger's when discussing the category changes. Because of this focus, and because CDD is very rare compared to other autistic disorders (an estimated one to six per 100,000 children as compared to autism's recent one in 150 during the same 2002 time period), I will also predominantly focus on how the changes will affect those with autism, Asperger's, and PDD-NOS. For a discussion of CDD's prevalence, see Eric Fombonne, *Prevalence of Childhood Disintegrative Disorder*, 6 AUTISM 149, 152–55 (2002).

realities. However, this section then discusses two overlooked ways in which the DSM changes interact with policy developments to *bolster* access to autism services rather than endanger access. Ultimately, it is impossible to definitively predict what impact the DSM-5 changes will have on service access because the change's impact depends on how doctors use the new category and what policies advocacy groups focus on next. Instead of a definitive prediction, the section focuses on presenting a more balanced picture of the DSM-5's impact on autism service access than present accounts that focus solely on service endangerment.

A. Evidence for Service Endangerment

1. Diagnosis Loss

The first piece of evidence that the DSM-5 changes may endanger access to services are the studies that apply the new DSM-5 criteria to children diagnosed with Asperger's, autism, and PDD-NOS under the DSM-IV-TR and that show some of these children no longer qualify for a diagnosis under the new criteria. The research that first attracted headlines about the DSM-5 changes resulting in service endangerment found that 39.4% of participants in the DSM-IV field trials who qualified for a diagnosis of autism, Asperger's, or PDD-NOS no longer qualified for the DSM-5's combined autism category.⁸⁶ However, a recent systematic review that pooled this analysis with other analyses of the percentage of DSM-IV-TR autism, Asperger's, and PDD-NOS patients who would not qualify for a diagnosis under the DSM-5 found a wide range of estimates: 7.3% to 68.4% of persons diagnosed under the DSM-IV-TR losing the diagnosis in the DSM-5.⁸⁷ That review found an average diagnosis loss of 31% of those children diagnosed under the DSM-IV-TR criteria.⁸⁸ In contrast, a study that *Autism Speaks* itself has advertised as important in applying the codified DSM-5 criteria, predicts a much lower service loss of 9% of previously diagnosed patients.⁸⁹

These epidemiological and clinical studies show that there is no consensus on the *extent* to which persons will lose a diagnosis, but that there is agreement that at least some fraction of those diagnosed under the DSM-IV-TR will not qualify for a diagnosis under DSM-5 criteria. And a failure to qualify for a DSM-5 autism

⁸⁶ McPartland et al., *supra* note 4, at 376.

⁸⁷ See Kristine M. Kulage et al., *How Will DSM-5 Affect Autism Diagnosis? A Systematic Literature Review and Meta-analysis*, 44 J. AUTISM & DEVELOPMENTAL DISORDERS 1918, 1920–21 (2014).

⁸⁸ *Id.* at 1927.

⁸⁹ For the study itself, see Marisela Huerta et al., *Application of DSM-5 Criteria for Autism Spectrum Disorder to Three Samples of Children with DSM-IV Diagnoses of Pervasive Developmental Disorders*, 169 AM. J. PSYCHIATRY 1056, 1056–64 (2012). For Autism Speaks' discussion of the study, see *Large DSM-5 Study Suggests Most Children Will Keep ASD Diagnosis*, AUTISM SPEAKS (Oct. 2, 2012), <http://www.autismspeaks.org/science/science-news/large-dsm-5-study-suggests-most-children-will-keep-asd-diagnosis>, archived at <http://perma.cc/LE7B-FZQJ>.

diagnosis translates into a risk of medical and educational service loss. The private insurance mandates specify that a child must be diagnosed with an autistic disorder to qualify for mandated services, meaning that those without an autism diagnosis will retain *general* insurance coverage and the treatments the insurer is willing to cover but will lose *specific* mandated access to autism treatments.

For special education services, a loss of a DSM diagnosis may affect service access during the *evaluation* step of special education service provision, where either a parent or a school requests an evaluation of the child for the purposes of seeing whether the child qualifies for special education services. The IDEA specifies that this evaluation must not rely on any single instrument or procedure, thus precluding the use of DSM criteria as the sole means for identifying a child with autism.⁹⁰ State guidance more explicitly instructs evaluators to not conflate a medical diagnosis of autism with a special educational diagnosis. For instance, Wisconsin's guide to autism evaluators in special education emphasizes that a medical diagnosis neither automatically qualifies a child for the autism educational disability category, nor is a medical diagnosis required to qualify for the category:

NOTE: A medical diagnosis of an autism spectrum disorder is not required in order to determine whether a student meets eligibility criteria for the educational impairment area of autism. If medical information is available it should be considered as part of the Individual Evaluation Program (IEP) team's evaluation but must not be the sole component. School personnel may not require parents to obtain a medical diagnosis of an autism spectrum disorder before proceeding with an educational evaluation

NOTE: A medical diagnosis of an autism spectrum disorder does not result in automatic eligibility for special education under the impairment area of autism. It is also possible for a student to have the educational impairment of autism but not need special education services.⁹¹

Despite these warnings, comparative prevalence rates suggest that a special education disability diagnosis of autism is more difficult to obtain than a medical diagnosis: the most recent CDC medical prevalence data reports one in sixty-eight children (1.5%) in 2010 had an autism diagnosis, while 2010 special education diagnosis reported an average of 8 in 1,000 (0.8%).⁹² Therefore, it seems that a child who has difficulty obtaining a *medical* diagnosis of autism under the new criteria will also have difficulty qualifying for special education services under the autism category. While the child may qualify under a different disability category such as

⁹⁰ See 20 U.S.C. § 1412(6)(B) (2012).

⁹¹ WIS. DEP'T OF PUB. INSTRUCTION, EDUCATIONAL EVALUATION GUIDE FOR AUTISM, at 1, 4 (2009), available at <http://sped.dpi.wi.gov/sites/default/files/imce/sped/pdf/elg-autism-guide.pdf>, archived at <http://perma.cc/3ZEB-GF4J>.

⁹² See *Autism Prevalance*, AUTISM SPEAKS, <https://www.autismspeaks.org/what-autism/prevalance>, archived at <https://perma.cc/S85U-JXUR> (last visited Mar. 26, 2015); *Facts About ASD*, *supra* note 12; *Historical State-Level IDEA Data Files*, *supra* note 68.

“emotional disturbance,”⁹³ the services associated with this category may not be as intensive or well-tailored to their problems as those associated with autism.

Yet there are two factors that might lessen the extent to which the DSM-5 results in a loss of a diagnosis. First is that in response to the DSM-5 changes, *Autism Speaks* has begun to successfully advocate for amendments to state private insurance mandates to specify that persons with autism receiving insurance coverage *before* the DSM-5’s publication should continue to receive the same benefits *after* the DSM-5’s publication.⁹⁴ Though Connecticut is the only state to have passed an amendment, *Autism Speaks* has noted its commitment to insuring that the DSM-5 change does not result in service loss, listing the contact information for the *Autism Speaks* advocacy team for persons who experience issues with insurance coverage under the new DSM-5.⁹⁵

Second are efforts to clarify that children who were previously diagnosed with autism should retain their diagnosis and not necessarily be reevaluated using the new DSM-5 criteria. A special note was added to the DSM-5 autism criteria before publication emphasizing this diagnostic retention:

Note: Individuals with a well-established DSM-IV diagnosis of autistic disorder, Asperger’s disorder, or pervasive developmental disorder not otherwise specified should be given the diagnosis of autism spectrum disorder. Individuals who have marked deficits in social communication, but whose symptoms do not otherwise meet criteria for autism spectrum disorder, should be evaluated for social (pragmatic) communication disorder.⁹⁶

After the DSM-5’s publication, authoritative bodies such as the Interagency Autism Coordinating Committee (IACC), a federal advisory committee that coordinates autism-focused efforts within the Department of Health and Human Services (HHS),

⁹³ See MacFarlane & Kanaya, *supra* note 23, at 667 (discussing how a child with an autism spectrum disorder like PDD-NOS or Asperger’s might qualify under the different disability categories of ‘other health impairment’ or ‘emotional disturbance’); see also Malinda L. Pennington et al., *Defining Autism: Variability in State Education Agency Definitions of and Evaluations for Autism Spectrum Disorders*, 2014 AUTISM RES. & TREATMENT 1, 3–7 (2014) (discussing how many states specify that if a child qualifies for special education under the emotional disturbance category, the child cannot also qualify under the autism category as the primary diagnosis. The authors note that many children with autism have co-occurring emotional disorders or problems that may lead them to qualify under that category).

⁹⁴ *CT Legislature Passes DSM-V Bill*, AUTISM SPEAKS (May 31, 2013), <http://www.autismspeaks.org/advocacy/advocacy-news/ct-legislature-passes-dsm-v-bill>, archived at <http://perma.cc/PG5G-AWP5>. To see the Connecticut bill, see CONN. GEN. STAT. ANN. § 38a-514b (West Supp. 2014).

⁹⁵ *Answers to Frequently Asked Questions about DSM-5*, AUTISM SPEAKS, <http://www.autismspeaks.org/dsm-5/faq>, archived at <http://perma.cc/W7UR-SG7J> (last visited Mar. 23, 2015).

⁹⁶ AM. PSYCHIATRIC ASS’N, DSM-5, *supra* note 63, at 51.

repeated this emphasis on the importance of persons retaining a diagnosis, emphasizing in a public statement that, “[i]t is important for families, individuals on the spectrum, and practitioners to know that individuals who currently have a diagnosis of autism spectrum disorder (ASD) based on the *DSM-IV* system will retain an ASD diagnosis for the purposes of qualifying for clinical and educational services. Individuals who currently have a diagnosis of ASD are not required to be ‘re-diagnosed’ with the new system in order to qualify for ASD services.”⁹⁷ This repeated emphasis on children not losing a DSM-IV-TR diagnosis, both in the DSM-5 text itself and in public statements by government agencies and advocacy groups, may lessen the extent to which the DSM-5 changes result in diagnosis loss. In turn, the impact on access to medical and educational services may be less dramatic than initially depicted.

2. *Essential Health Benefits Threatening the Mandates*

While the first service endangerment threat comes from the DSM-5 itself, the second service endangerment threat arises from the ACA implementation that is taking place at the same time as the DSM-5 implementation. The ACA mandates the coverage of specific mental health benefits for private insurance plans by defining a minimum federal standard of Essential Health Benefits (EHB) that include: “mental health and substance use disorder services, including behavioral health treatment.”⁹⁸ Starting in 2014, all plans on the individual and small group market, whether listed on a state health exchange or not, must include essential health benefits.⁹⁹ States are given the power to define their own EHBs based on one of four benchmark plans: one of the three largest small group plans, one of the three largest state employee plans, one of the three largest federal employees plans, or the largest HMO plan in the state’s commercial market. The state, rather than private insurers, is then held financially liable for state-mandated services that are *not* included in this benchmark plan beginning in 2016.¹⁰⁰ In other words, if a state chooses a benchmark plan that does not cover comprehensive autism services, and if the state nevertheless requires

⁹⁷ INTERAGENCY AUTISM COORDINATING COMM., STATEMENT REGARDING SCIENTIFIC, PRACTICE AND POLICY IMPLICATIONS OF CHANGES IN THE DIAGNOSTIC CRITERIA FOR AUTISM SPECTRUM DISORDER 1, 6–7 (2014), *available at* http://iacc.hhs.gov/publications/2014/statement_iacc_dsm5_changes_criteria_040214.pdf, *archived at* <http://perma.cc/6VSU-2KYT>.

⁹⁸ See AMANDA CASSIDY ET AL., HEALTH AFFAIRS, HEALTH POLICY BRIEF 1–2 (2012), http://healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_68.pdf, *archived at* <http://perma.cc/66XD-QJGT>.

⁹⁹ Self-insured health plans, large group plans, and grandfathered health plans that existed at the time of the ACA’s enactment and have not significantly changed their benefit or premium structure since then, are exempt. *Id.* at 2.

¹⁰⁰ See generally Michelle Andrews, *Health Law Tempers New State Coverage Mandates*, KAISER HEALTH NEWS (Sept. 16, 2014), <http://kaiserhealthnews.org/news/health-law-tempers-new-state-coverage-mandates>, *archived at* <http://perma.cc/W4CE-7XBX> (“[T]he law requires states, not insurers, to cover the cost of mandates . . .”).

that plans cover comprehensive autism services, the state must cover the cost of those comprehensive services. When this process for choosing EHBs was announced, autism advocates pressed for ABA to be included as a mandated EHB in the federally defined minimum category.¹⁰¹ Yet the federal government did not specify that ABA was an EHB, and instead only mentioned “behavioral health treatment” in general.¹⁰² Has this policy development, which weakens the link between a DSM autism diagnosis and expensive autism services like ABA, endangered service access? Put simply, have the ACA’s EHB requirements undermined the mandates’ attempts to guarantee access to certain autism services?

Two developments mitigate the ACA’s negative impact on autism service access. First the success of autism advocacy groups in pressing states to choose a benchmark plan that contains mandated services like ABA. A report analyzing states’ choices of benchmark plans found that twenty-five states plus the District of Columbia chose benchmark plans that cover ABA.¹⁰³ To analyze not only *how many* states have EHBs that include intensive autism services but also what proportion of children with autism live in those states, data was combined from two sources. First, data was gathered from the 2009/2010 National Survey of Children with Special Healthcare Needs (NS-CSHCN), which reports the percentage of children eighteen years old and younger with autism living in each state.¹⁰⁴ Second data was gathered from the 2010 U.S. census, which reports the number of children eighteen and younger living in each state.¹⁰⁵ Combined, these highlight the proportion of children with autism living in states that fall into the following four categories, arranged in increasing order of service security: states with no autism mandate and no EHB inclusion of intensive autism services (hereafter “EHB coverage”), states with a mandate but no EHB coverage, states with EHB coverage and no mandate, and finally, states with both EHB coverage and a mandate (Figure 2). As the figure illustrates, the majority of children with autism (58.2%) live in states that have both a mandate guaranteeing services and explicit EHB inclusion of intensive autism services. For the 25.6% of children with autism living in states with a mandate but no EHB coverage, a second policy development may help secure their continued

¹⁰¹ See, e.g., Michelle Diament, *Feds Omit ABA Therapy From New Insurance Requirements*, DISABILITY SCOOP (Feb. 22, 2013), <http://www.disabilityscoop.com/2013/02/22/feds-aba-insurance/17346>, archived at <http://perma.cc/US8X-D89K>.

¹⁰² *Id.*

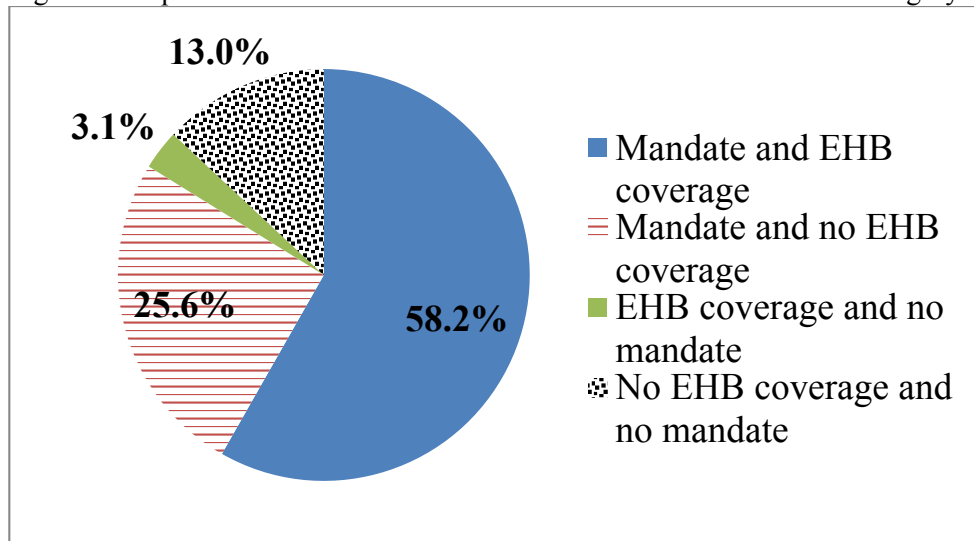
¹⁰³ See ROBERT WOOD JOHNSON FOUND., *ESSENTIAL HEALTH BENEFITS: 50-STATE VARIATIONS ON A THEME 2* (2014), available at http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2014/rwjf416179, archived at <http://perma.cc/X8PV-HZ8Y>.

¹⁰⁴ Data query from the Child and Adolescent Health Measurement Initiative, *Browse by Survey & Topic*, DATA RES. CTR. FOR CHILD & ADOLESCENT HEALTH, <http://www.childhealthdata.org/browse/survey>, archived at <http://perma.cc/7WSQ-G4ZS> (last visited Mar. 13, 2015) (“To [use this] interactive search: 1) Select a Survey, Survey Year, and State or Region. 2) Select your desired Topic/Starting Point. 3) Select your indicator or measure. This will direct you to a results page where you can compare across states, regions and by numerous subgroups.”).

¹⁰⁵ NOSS, *supra* note 74.

access to intensive autism services. Namely, states are clarifying that the mandates *do not* apply to the individual and small group insurance plans that are required to cover essential health benefits, but that they *do* apply to large group plans.¹⁰⁶ This second policy development increases the likelihood that mandates still apply to some of the plans in states where EHBs do not cover intensive autism services.

Figure 2. Proportion of Children with Autism in Each Insurance Service Category¹⁰⁷



B. Evidence for Service Bolstering

Now that the Article has reviewed evidence for the DSM-5 revisions and related policy developments threatening access to services, outlining both the merits of this evidence and mitigating factors that lessen the negative impact of these changes, this section now turns to two overlooked *benefits* of the DSM-5 revisions for services access. Research and media commentary that claims the DSM-5 will *endanger* services have been reviewed, yet there were no studies found that point to possible benefits of the changes for access to services.¹⁰⁸ Therefore, there are two factors that might help these children access services rather than block their access. These factors apply to children who previously had an Asperger's or PDD-NOS diagnosis and who *are* able to obtain an autism diagnosis under the new criteria. Analyses that separate diagnosis loss by DSM-IV-TR subtype suggest that for PDD-NOS, anywhere from 3% to 75% will *retain* a diagnosis under the DSM-5; for

¹⁰⁶ See generally Andrews, *supra* note 100 (“The law may say that the mandate only applies to large group plans . . .”).

¹⁰⁷ NOSS, *supra* note 74; DATA RES. CTR. FOR CHILD & ADOLESCENT HEALTH, *supra* note 104.

¹⁰⁸ See, e.g., Carey, *supra* note 3; Gann, *supra* note 5; Steenhuisen, *supra* note 6.

Asperger's, anywhere from 4% to 83%.¹⁰⁹ Furthermore, for the reasons outlined in the section above, we can assume that more children will retain a diagnosis than these studies predict because of repeated emphases on those with a DSM-IV-TR Asperger's or PDD-NOS diagnosis receiving a DSM-5 diagnosis of autism for the purposes of service access. This section will show two overlooked benefits for this population that "switches" diagnoses from PDD-NOS or Asperger's to autism. The claim in this section is not that these contributors to service access will necessarily outweigh the service endangerment contributors outlined previously, but instead that they are benefits of the DSM-5 changes to the autism category that need to be accounted for when analyzing DSM diagnosis-service entitlement links.

1. Reduced Insurance Ambiguity

The first factor is reduced ambiguity about *which* types of autism are covered by a state's private insurance mandates or EHBs. Table 3 outlines the definitions of which autistic disorders are covered by each state's private insurance mandate. It shows that while many states explicitly define the mandate to cover autism, Asperger's, and PDD-NOS, others offer more vague definitions that make it unclear whether Asperger's is included in mandated intensive treatment coverage. For instance, New Hampshire and New Jersey's legislation, which only specifies "pervasive developmental disorder or autism"¹¹⁰ or Vermont's legislation, which includes autism spectrum disorders for coverage but does not clearly specify that Asperger's should be covered.¹¹¹ Because the DSM-5 changes will result in many of the children who once had an Asperger's diagnostic label receiving an autism diagnosis, the changes can help clarify that this population is eligible for states' mandated insurance benefits.

2. Increased Special Education Service Eligibility for Children Formerly Diagnosed with Asperger's

The second overlooked way through which the DSM changes could bolster, rather than undermine, access to services is by helping more children with Asperger's qualify for the autism special education disability category. As discussed, the IDEA gives states the power to define their own special education criteria for each disability category as long as the criteria generally match or are more generous than the federal disability categories.¹¹² The IDEA 2004 criteria defines the autism disability category as,

¹⁰⁹ See Kulage et al., *supra* note 87, at 1923–25.

¹¹⁰ N.H. REV. STAT. ANN. § 417-E:2 (Supp. 2014); *see also* N.J. STAT. ANN. § 17:48E-35.33 (West Supp. 2014).

¹¹¹ VT. STAT. ANN. tit. 8, § 4088(i) (Supp. 2014).

¹¹² See Pennington et al., *supra* note 93, at 2; *see also* MacFarlane & Kanaya, *supra* note 23, at 662–64 ("States, however, have the flexibility to create their own eligibility criteria as long as it meets or exceeds the minimal requirements . . .").

a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.¹¹³

This definition uses the general category of autism rather than specifying that children with *other* types of autistic disorders such as Asperger's and PDD-NOS in the DSM-IV-TR are also included. MacFarlane and Kanaya, in a detailed analysis of each state's special education criteria, find that this leeway granted to states leads to substantial variation in the criteria each uses for an autism diagnosis.¹¹⁴ Most relevant for understanding the DSM-5's changes is that only twenty out of thirty-one states (39.2%) explicitly include PDD-NOS or Asperger's in their criteria, while the other 60.8% only explicitly mention autism.

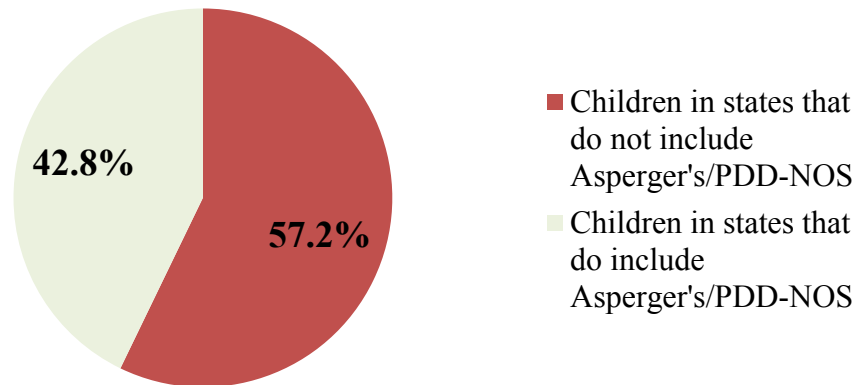
There is little data on whether and how children with Asperger's or PDD-NOS living in the two sets of states—those that explicitly include the disorders in their state autism definition and those that do not—experience different levels of access to special education services or depths of service once deemed eligible.¹¹⁵ Yet, assuming that at least some children with Asperger's and PDD-NOS living in states *without* their explicit inclusion either face difficulty qualifying for services under the autism category or qualify under a different category such as emotional disturbance that may lead to a less generous IEP, then the impact that the combined category has for children living in these states can be examined. Figure 3 combines the classification of states into those that include Asperger's/PDD-NOS and those that do not with data on the proportion of children with autism in special education present in each of the fifty states (using 2010 data). It shows that a majority (57.2%) of children with Autism live in states whose special education criteria for the autism category does not explicitly include Asperger's or PDD-NOS.

¹¹³ 34 C.F.R. § 300.8(b)(1)(i) (2014).

¹¹⁴ See generally MacFarlane & Kanaya, *supra* note 23, at 663–68 (“[I]nter-state variability has a more significant impact on ‘low incidence’ categories, such as Autism . . .”).

¹¹⁵ For instance, a child living in a non-Asperger's included state having an IEP with less intensive services than a child living in an Asperger's included state.

Figure 3. Proportion of Special Education Autism Population in Each Special Education Service Category¹¹⁶



Future research needs to analyze the evaluation step of DSM-5 changes more closely to investigate precisely how the new DSM-5 criteria are implemented. But, research indicates that the changes could help allow children previously diagnosed with Asperger's or PDD-NOS to more easily qualify for the autism special education category, which in turn, could bolster the depth of IEP services. This is especially the case if there are clearer guidelines for what services are appropriate for those with autism, as compared to the services that are appropriate for those with emotional disturbance, other health impairments, or other categories under which they might have received special education services.

CONCLUSION

The present paper addressed the question: how will the DSM-5 revisions impact access to autism services? While media commentators posited a straightforward link between DSM-5 changes and service access, we should consider the different strength of couplings between a DSM diagnosis and entitlement access by investigating the factors that result in a diagnoses translation into service access. The Article began by outlining the pre DSM-5 policy

¹¹⁶ Figure was created by the author with data from two sources. See *The 2012 Statistical Abstract: Population*, U.S. CENSUS BUREAU, <http://www.census.gov/compendia/statab/cats/population.html>, archived at <http://perma.cc/Y7AY-EZGL> (last visited Mar. 12, 2014); *Historical State-Level IDEA Data Files*, *supra* note 68.

background for autism entitlements. This background helps contextualize the policy environment into which the DSM-5 changes entered. Rather than examining autism medical and educational services in isolation, we should conceive of these services as *interdependent*, and investigate how changes to the uptake or depth of medical service access affect changes to the uptake or depth of educational service access. Taking this interdependent perspective, the Article showed how the passage of private insurance mandates for autism services has led to more rapid uptake of special education services for autism, showing how one entitlement that creates a close DSM diagnosis-service link (an insurance mandate) increases uptake of another entitlement with a looser DSM diagnosis-service link (special education services). This shows that if DSM-5 revisions undermine access to medical entitlements there will be a corresponding impact on access to educational entitlements.

But will the DSM-5 undermine access to entitlements? Part III addresses this question by reviewing the evidence for two ways that the DSM-5 and co-occurring policies may threaten service access. Part III also pointed to factors that might mitigate the extent of service loss as well as two overlooked *benefits* of the DSM-5 revisions for service access. Future research should investigate how clinicians, advocacy groups, special education evaluation teams, and other stakeholders use the DSM-5 changes in practice and craft policies that are responsive to concerns introduced by the changes. For now, the autism case study is used to highlight the benefits of looking into the “black box” that often stands between a DSM diagnosis and service access, and correspondingly thinking about the link between DSM diagnoses and services in terms of tighter versus looser coupling between the diagnosis and treatment.

Table 1. Descriptive Statistics for Regression Variables

	Percent	Mean	SD
Presence of an autism insurance mandate	--	--	--
Yes mandate	58.8%	--	
No mandate	41.2%	--	
Median income ¹¹⁷	--	\$50,738.2	\$7,558
Percent ERISA exemption ¹¹⁸	--	36.4%	5.8
Total number of state mandates ¹¹⁹		44.4%	13.6
Political affiliation ¹²⁰			
0–2 (Democrat)	41.2%	--	--
3 (Independent)	0%	--	--
4–6 (Republican)	58.8%	--	--
Generosity of special education criteria ¹²¹			
Not generous	60.8%	--	--
Generous	39.2%	--	--

¹¹⁷ See NOSS, *supra* note 74.

¹¹⁸ See AGENCY FOR HEALTHCARE RESEARCH & QUALITY, *supra* note 77.

¹¹⁹ See BUNCE & WIESKE, *supra* note 75, at 3.

¹²⁰ See NAT'L CONFERENCE OF STATE LEGISLATURES, *supra* note 76.

¹²¹ See MacFarlane & Kanaya, *supra* note 23, at 665–66.

Table 2. Factors Predicting Utilization of Special Education Services for Autism

	β
Presence of an autism insurance mandate	0.468**
Median income ¹²²	0.000
Percent ERISA exemption ¹²³	-6.280*
Total number of state mandates ¹²⁴	0.004
Political affiliation ¹²⁵	-0.121
Generosity of special education criteria ¹²⁶	0.210

* denotes significance at the 5% level, ** denotes significance at the 1% level

¹²² See NOSS, *supra* note 74.

¹²³ See AGENCY FOR HEALTHCARE RESEARCH & QUALITY, *supra* note 77.

¹²⁴ See BUNCE & WIESKE, *supra* note 75, at 11–34.

¹²⁵ See NAT'L CONFERENCE OF STATE LEGISLATURES, *supra* note 76.

¹²⁶ See MacFarlane & Kanaya, *supra* note 23, at 665.

Table 3. Definitions of Autism in Private Insurance Mandates

State	Regulation	Language for autism definition
Alaska	ALASKA STAT. § 21.42.397(g)(2) (2014)	“‘[A]utism spectrum disorders’ means pervasive developmental disorders, or a group of conditions having substantially the same characteristics as pervasive developmental disorders, as defined in the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders-IV-TR, as amended or reissued from time to time[.]”
Arizona	ARIZ. REV. STAT. ANN. § 20-826.04(E)(1) (2010)	“‘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.”
Arkansas	ARK. CODE ANN. § 23-99-418(a)(3) (2014)	“‘Autism spectrum disorder’ means any of the pervasive developmental disorders as defined by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders, including: (A) Autistic disorder; (B) Asperger’s disorder; and (C) Pervasive developmental disorder not otherwise specified[.]”
California	CAL. HEALTH & SAFETY CODE § 1374.73(D)(2) (West Supp. 2015)	“‘Pervasive developmental disorder or autism’ shall have the same meaning and interpretation as used in Section 1374.72.”
Colorado	COLO. REV. STAT. § 10-16-104(1.4)(III) (2014)	“‘Autism spectrum disorders’ or ‘ASD’ includes the following neurobiological disorders: Autistic disorder, Asperger’s disorder, and atypical autism as a diagnosis

		within pervasive developmental disorder not otherwise specified, as defined in the most recent edition of the diagnostic and statistical manual of mental disorders, at the time of the diagnosis.”
Connecticut	CONN. GEN. STAT. ANN. § 38a-514b (a)(3) (West Supp. 2014)	“‘Autism spectrum disorder’ means a pervasive developmental disorder set forth in the most recent edition of the American Psychiatric Association’s ‘Diagnostic and Statistical Manual of Mental Disorders’, including, but not limited to, Autistic Disorder, Rett’s Disorder, Childhood Disintegrative Disorder, Asperger’s Disorder and Pervasive Developmental Disorder Not Otherwise Specified.”
Delaware	DEL. CODE ANN. tit. 18, §3366(e)(3) (Supp. 2014)	“‘Autism spectrum disorders’ means any of the pervasive developmental disorders as defined by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM), including Autistic Disorder, Asperger’s Disorder and Pervasive Developmental Disorder Not Otherwise Specified, as such may be amended hereafter from time to time.”
District of Columbia	D.C. CODE § 31–3271(2) (LexisNexis 2001)	“The term ‘congenital or genetic birth defect’ includes: (A) Autism or an autism spectrum disorder[.]”
Florida	FLA. STAT. ANN. § 627.6686(2)(b) (West Supp. 2015)	“‘Autism spectrum disorder’ means any of the following disorders as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association: 1. Autistic disorder. 2. Asperger’s syndrome. 3. Pervasive developmental disorder not otherwise specified.”

Illinois	215 ILL. COMP. STAT. ANN. § 5/356z.14(i) (West Supp. 2013)	“Autism spectrum disorders’ means pervasive developmental disorders as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders, including autism, Asperger’s disorder, and pervasive developmental disorder not otherwise specified.”
Indiana	IND. CODE ANN. § 27-8-14.2-3 (West Supp. 2014)	“As used in this chapter, ‘autism spectrum disorder’ means a neurological condition, including Asperger’s syndrome and autism, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.”
Iowa	IOWA CODE ANN. § 514C.28(2)(c) (West Supp. 2014)	“Autism spectrum disorders’ means any of the pervasive developmental disorders including autistic disorder, Asperger’s disorder, and pervasive developmental disorders not otherwise specified. The commissioner, by rule, shall define ‘autism spectrum disorders’ consistent with definitions provided in the most recent edition of the American psychiatric association’s diagnostic and statistical manual of mental disorders, as such definitions may be amended from time to time. The commissioner may adopt the definitions provided in such manual by reference.”
Kansas	KAN. STAT. ANN. § 75-6524(b)(2) (Supp.2013)	“Autism spectrum disorder’ means the following disorders within the autism spectrum: Autistic disorder, Asperger’s syndrome and pervasive developmental disorder not otherwise specified, as such terms are specified in the diagnostic and

		statistical manual of mental disorders, fourth edition, text revision (DSM-IV-TR), of the American psychiatric association, as published in May, 2000, or later versions as established in rules and regulations adopted by the behavioral sciences regulatory board pursuant to K.S.A. 74-7507, and amendments thereto.”
Kentucky	KY. REV. STAT. ANN. § 304.17A-141(3) (LexisNexis 2011)	“‘Autism spectrum disorder’ means a physical, mental, or cognitive illness or disorder which includes any of the pervasive developmental disorders as defined by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (‘DSM’) published by the American Psychiatric Association, including Autistic disorder, Asperger’s disorder, and Pervasive Developmental disorder Not Otherwise Specified.”
Louisiana	LA. REV. STAT. ANN. § 22:1050(G)(3) (2009)	“‘Autism spectrum disorders’ means any of the pervasive developmental disorders as defined by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM), including Autistic Disorder, Asperger’s Disorder, and Pervasive Developmental Disorder Not Otherwise Specified.”
Maine	ME. REV. STAT. ANN. tit. 24–A, § 2768(1)(B) (Supp. 2014)	“‘Autism spectrum disorders’ means any of the pervasive developmental disorders as defined by the Diagnostic and Statistical Manual of Mental Disorders, 4th edition, published by the American Psychiatric Association, including autistic disorder, Asperger’s disorder and pervasive developmental disorder not otherwise specified.”

Maryland	S.B. 694, 2014 Leg., 434th Sess. § 17-6A- 01(2) (Md. 2014)	Autism spectrum disorder.
Massachusetts	Mass. Gen. Laws Ann. ch. 32A, § 25(a) (West 2011)	“‘Autism spectrum disorders’, any of the pervasive developmental disorders as defined by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders, including autistic disorder, Asperger’s disorder and pervasive developmental disorders not otherwise specified.”
Michigan	Mich. Comp. Laws Ann. § 550.1416e(6)(c) (West Supp. 2014)	“‘Autism spectrum disorders’ means any of the following pervasive developmental disorders as defined by the diagnostic and statistical manual: (i) Autistic disorder. (ii) Asperger’s disorder. (iii) Pervasive developmental disorder not otherwise specified.”
Minnesota	Minn. Stat. Ann. § 62A.3094(b) (West Supp. 2015)	“‘Autism spectrum disorders’ means the conditions as determined by criteria set forth in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.”
Missouri	Mo. Ann. Stat. § 376.1224.1(3) (West 2013)	“‘Autism spectrum disorders’, a neurobiological disorder, an illness of the nervous system, which includes Autistic Disorder, Asperger’s Disorder, Pervasive Developmental Disorder Not Otherwise Specified, Rett’s Disorder, and Childhood Disintegrative Disorder, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association[.]”

Montana	Mont. Code Ann. § 33-22-515(2) (2013)	“Coverage under this section must be provided to a child who is diagnosed with one of the following disorders as defined by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders: (a) autistic disorder; (b) Asperger’s disorder; or (c) pervasive developmental disorder not otherwise specified.”
Nebraska	Neb. Rev. Stat. Ann. § 44-7,106(1)(b) (LexisNexis Supp. 2014)	“Autism spectrum disorder means any of the pervasive developmental disorders or autism spectrum disorder as defined by the Diagnostic and Statistical Manual of Mental Disorders, as the most recent edition of such manual existed on July 18, 2014[.]”
Nevada	Nev. Rev. Stat. Ann. § 689A.0435(7)(b) (Lexis-Nexis 2014)	““Autism spectrum disorders’ means a neurobiological medical condition including, without limitation, autistic disorder, Asperger’s Disorder and Pervasive Developmental Disorder Not Otherwise Specified.”
New Hampshire	N.H. Rev. Stat. Ann. § 417-E:2 (Supp. 2014)	“Coverage for Treatment of Pervasive Developmental Disorder or Autism.”
New Jersey	N.J. Stat. Ann. § 17:48E-35.33(a) (West Supp. 2014)	“The health service corporation shall provide coverage for expenses incurred in screening and diagnosing autism or another developmental disability.”
New Mexico	N.M. Stat. Ann. § 59A-22-49(H)(1) (Supp. 2014)	““[A]utism spectrum disorder’ means a condition that meets the diagnostic criteria for the pervasive developmental disorders published in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision, also known as DSM-IV-TR, published by the American psychiatric association, including autistic disorder; Asperger’s

		disorder; pervasive developmental disorder not otherwise specified; Rett's disorder; and childhood disintegrative disorder[.]”
New York	N.Y. Ins. Law § 3216(C)(i) (McKinney Supp. 2015)	“‘[A]utism spectrum disorder’ means any pervasive developmental disorder as defined in the most recent edition of the diagnostic and statistical manual of mental disorders, including autistic disorder, Asperger’s disorder, Rett’s disorder, childhood disintegrative disorder, or pervasive developmental disorder not otherwise specified (PDD-NOS).”
Oregon	Or. Rev. Stat. § 743A.190(3)(b) (2013)	“‘Pervasive developmental disorder’ means a neurological condition that includes Asperger’s syndrome, autism, developmental delay, developmental disability or mental retardation.”
Pennsylvania	40 Pa. Cons. Stat. Ann. § 764h(f)(3) (West 2014)	“‘Autism spectrum disorders’ means any of the pervasive developmental disorders defined by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM), or its successor, including autistic disorder, Asperger’s disorder and pervasive developmental disorder not otherwise specified.”
Rhode Island	R.I. Gen. Laws Ann. § 27-20.11-2(2) (West Supp. 2014)	“‘Autism spectrum disorders’ means any of the pervasive developmental disorders as defined by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) published by the American Psychiatric Association.”
South Carolina	S.C. Code Ann. § 38-71-280(A)(1) (Supp. 2013)	“‘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.”
Texas	Tex. Ins. Code Ann. § 1355.001(3) (West 2009)	“‘Autism spectrum disorder’ means a neurobiological disorder that includes autism, Asperger’s syndrome, or Pervasive Developmental Disorder—Not Otherwise Specified.”
Utah	Utah Code Ann. § 31A-22-642(1)(b) (West Supp. 2014)	“‘Autism spectrum disorder’ means pervasive developmental disorders as defined by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM).”
Vermont	Vt. Stat. Ann. tit. 8, § 4088i(f)(2), (5) (Supp. 2014)	“(2) ‘Autism spectrum disorders’ means one or more pervasive developmental disorders as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders, including autistic disorder, pervasive developmental disorder not otherwise specified, and Asperger’s disorder.” “(5) ‘Early childhood developmental disorder’ means a childhood mental or physical impairment or combination of mental and physical impairments that results in functional limitations in major life activities, accompanied by a diagnosis defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM) or the International Classification of Disease (ICD). The term includes autism spectrum disorders, but does not include a learning disability.”

Virginia	Va. Code Ann. § 38.2-3418.17(B) (2014)	“‘Autism spectrum disorder’ means any pervasive developmental disorder, including (i) autistic disorder, (ii) Asperger’s Syndrome, (iii) Rett syndrome, (iv) childhood disintegrative disorder, or (v) Pervasive Developmental Disorder—Not Otherwise Specified, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.”
West Virginia	W.Va. Code Ann. §§ 5-16B-6e(e)(2) (LexisNexis Supp. 2013)	“‘Autism spectrum disorder’ means any pervasive developmental disorder, including autistic disorder, Asperger’s Syndrome, Rett syndrome, childhood disintegrative disorder, or Pervasive Development Disorder as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.”
Wisconsin	Wis. Stat. Ann. § 632.895(12m)(a)(1) (West 2014)	“‘Autism spectrum disorder’ means any of the following: a. Autism disorder. b. Asperger’s syndrome. c. Pervasive developmental disorder not otherwise specified.”