



Effects of Autism Spectrum Disorder Insurance Mandates on the Treated Prevalence of Autism Spectrum Disorder

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KEY FINDINGS: State mandates requiring commercial health plans to cover services for children with autism spectrum disorder increased the number of children diagnosed with the disorder. However, diagnosis rates remain much lower than community estimates, suggesting that many commercially insured children with ASD remain undiagnosed or are insured through public plans.

THE QUESTION

Responding to the growing prevalence of autism spectrum disorder (ASD) among children, and insurer reluctance to pay for expensive treatments, 44 states now have mandates requiring commercial plans to cover behavioral services for children with ASD. These mandates apply to state-regulated plans but do not apply to large, self-insured employer group plans, which are federally-regulated. The state mandates vary in terms of the age ranges they cover and the kinds of plans to which they apply.

Insurers have opposed the mandates, which they claimed would dramatically increase the number of children diagnosed with ASD and drastically increase health spending. ASD is thought to be underdiagnosed with its treated prevalence – the number of individuals diagnosed with ASD in the health care system – far below the Centers for Disease Control and Prevention’s estimated community prevalence of 15 per 1,000 children. But little is known about the actual effects of these mandates. David Mandell and colleagues used claims data from three large national insurers to analyze the effects of state mandates on the rate at which commercially insured children are diagnosed with ASD.

THE FINDINGS

Twenty-nine states had ASD insurance mandates during the study period, 2008-2013. Indiana was the first state to

implement a mandate in 2001, followed by three states in 2008 (Illinois, South Carolina, and Texas), before the start of the study. During the study period, mandates were implemented by six states in 2009 (Arizona, Florida, Louisiana, New Mexico, Pennsylvania, and Wisconsin), four states in 2010 (Colorado, Connecticut, Montana, and New Jersey), eight states in 2011 (Arkansas, Kentucky, Massachusetts, Maine, Missouri, New Hampshire, Nevada, and Vermont), and seven states in 2012 (California, Delaware, Michigan, New York, Rhode Island, Virginia, and West Virginia). All state mandates applied to fully insured firms with more than 50 employees; 22 of the 29 state mandates also applied to fully insured firms with 50 or fewer employees. By the end of the study period, 18 of the 29 mandates covered individuals from birth through 18 years or older.

Of the more than one million children in the claims data sample, the authors identified 154,089 children diagnosed with ASD. Controlling for time trends and demographic factors, the study found that implementation of a mandate was associated with an increase of 12.7% in the treated prevalence of eligible children with ASD over the study period, with the effects building over time – 10.4% in the first year of the mandate, 17.1% in the second year, and 18.0% in the third and later years. The adjusted prevalence rate was 1.8 per 1,000 children in states with ASD insurance mandates and 1.6 per 1,000 children in states without such a mandate.

THE IMPLICATIONS

These findings indicate that the mandates are having their intended effects, and that those effects build over time. But even three years or more after implementation, the treated prevalence of ASD was much lower than community prevalence estimates. This finding may allay concerns that mandates will substantially increase insurance costs, but it suggests that many commercially insured children with ASD remain undiagnosed or are being treated only through publicly funded systems.

It is clear that the mandates have not had the full effect that advocates desired. The authors note that the shortfall might be due to vague and difficult regulatory processes that providers must follow, low reimbursements for assessment and treatment, and a shortage of qualified clinicians to meet the growing demand for ASD-related care. The results suggest the need for additional strategies to enforce the mandates and address regulatory and health system-related barriers that inhibit the timely and appropriate identification of children with ASD.

THE STUDY

The authors used combined claims data (assembled by the Health Care Cost Institute) from three large, national health insurance companies: United Healthcare, Aetna and Humana. They identified 154,089 children (birth through 21 years) diagnosed with ASD during the five-year study period from January 2008 through December 2012. To identify whether a child resided in a state with an implemented ASD mandate law, they compiled detailed information from [Autism Speaks](#) about state mandates, and verified the information by reviewing the original mandate laws.

They compared the treated prevalence of ASD within states before and after mandate implementation, and between

groups of children who would and would not be affected by the laws based on the source of their health insurance and their age. They compared four groups of children: those in states with active ASD insurance mandates, who were subject to the mandate; those in states with an active mandate who were not subject to the mandate; those in states without a mandate who would have been subject to the mandate if one were active; and those in states without a mandate who would not have been subject to the mandate if one were active. The use of comparison groups of children in states without mandates accounted for secular trends in treated prevalence unrelated to state ASD mandate laws. In addition, the authors looked at whether the effect of the mandates changed over time, based on how many years a law had been in place.

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