Changes in prevalence and healthcare utilization rates among the population with autism spectrum disorder following the Affordable Care Act

Background
Autism spectrum disorder (ASD) is the fastest growing neurodevelopmental disorder in the United States, with a growth rate of 119% from 2000 (1 in 150 children) to 2010 (1 in 68 children). Under the Patient Protection and Affordable Care Act (ACA), it is mandatory for all private health plans, except for “grandfathered” plans, to cover preventive services, including autism screening. Increased autism screening is expected to increase detection and diagnosis of ASD, based on previous experience in other disease states. However, utilization and cost data in the ASD population after implementation of ACA is not currently available.

Objective
To examine changes in ASD prevalence, healthcare utilization and cost in individuals diagnosed with ASD after implementation of the ACA.

Methods
Study Design: Retrospective descriptive study
Data Source:
• The analysis was conducted using administrative claims data for individuals with commercial coverage from Humana Inc., a healthcare company providing medical insurance for over 14 million individuals across the United States as of 4th quarter 2014.

Inclusion Criteria:
• Commercial coverage during either the 2013 or 2014 plan year
• At least one inpatient (IP) or emergency department (ED) claim, or at least two outpatient (OP) claims with ASD in the top 6 diagnoses
• Diagnosis of ASD defined by ICD-9-CM 299.xx

Study Measures and Analyses:
• Prevalence of individuals diagnosed with ASD for each plan year
• Calculated as the number of individuals with ASD in a plan year divided by the number of individuals with commercial coverage in that year.
• Healthcare utilization, per 1000 persons
• Inpatient days
• Outpatient or emergency department visits
• Calculated as sum of utilization divided by total person months in each plan year, then multiplied by 12,000
• Total allowed healthcare costs, per person per month (PPPM)
• Allowed costs are defined as discounted charges paid by the health plan minus any costs not covered by the plan.
• Calculated as sum of allowed costs divided by total person months in each plan year

Conclusions and Limitations
• Our descriptive findings indicate that the prevalence of members diagnosed with ASD remained consistent post-ACA.
• A directional decrease in IP utilization by individuals diagnosed with ASD was accompanied by an increase in OP and ER services. There was also an increased trend in cost per person per month for individuals with ASD.
• These findings may be partially explained by expansion of healthcare services after ACA implementation. Certain factors, such as increases in provider fees or receiving additional diagnoses due to increased access to services, may have resulted in cost and utilization increases; such factors were not assessed in this analysis.
• Limitations associated with administrative claims data, such as unavailable data and coding errors, apply to this study. People who did not exercise their health insurance benefit at admission could not be included. Furthermore, people who did not seek care for their ASD could not be identified as having an admission. Consequently, both admissions and costs may be underestimated.
• Changes in commercial plan coverage from one year to the next may have influenced cost and utilization rates.

References