

Sources of Increased Expenditures for Young Children with Autism Spectrum Disorder Diagnoses in Employer-Sponsored Plans, 2016–2021

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Background

Autism spectrum disorder (ASD)

- ASD is a neurodevelopment disorder characterized by deficits in social and/or communication skills and the presence of restricted interests or repetitive behaviors.
- ASD prevalence among US children has significantly risen, leading to increased health costs.
- Early intensive behavioral intervention is recommended intervention for young children with ASD.

Objectives

- To compare trends during 2016–2021 in spending per child aged 3–7 years enrolled in private health plans, with and without ASD diagnoses.
- To estimate the contribution of behavioral intervention-related services to an increase in ASD-related spending.

Methods

Data

- MarketScan® Commercial Database for employer-sponsored (ESI) plans, 2016–2021

Study population

- Children aged 3–7 years at the beginning of the calendar year
- Continuously enrolled in ESI plans
- Inpatient or outpatient claims for at least one calendar year from 2016 to 2021

Case definitions

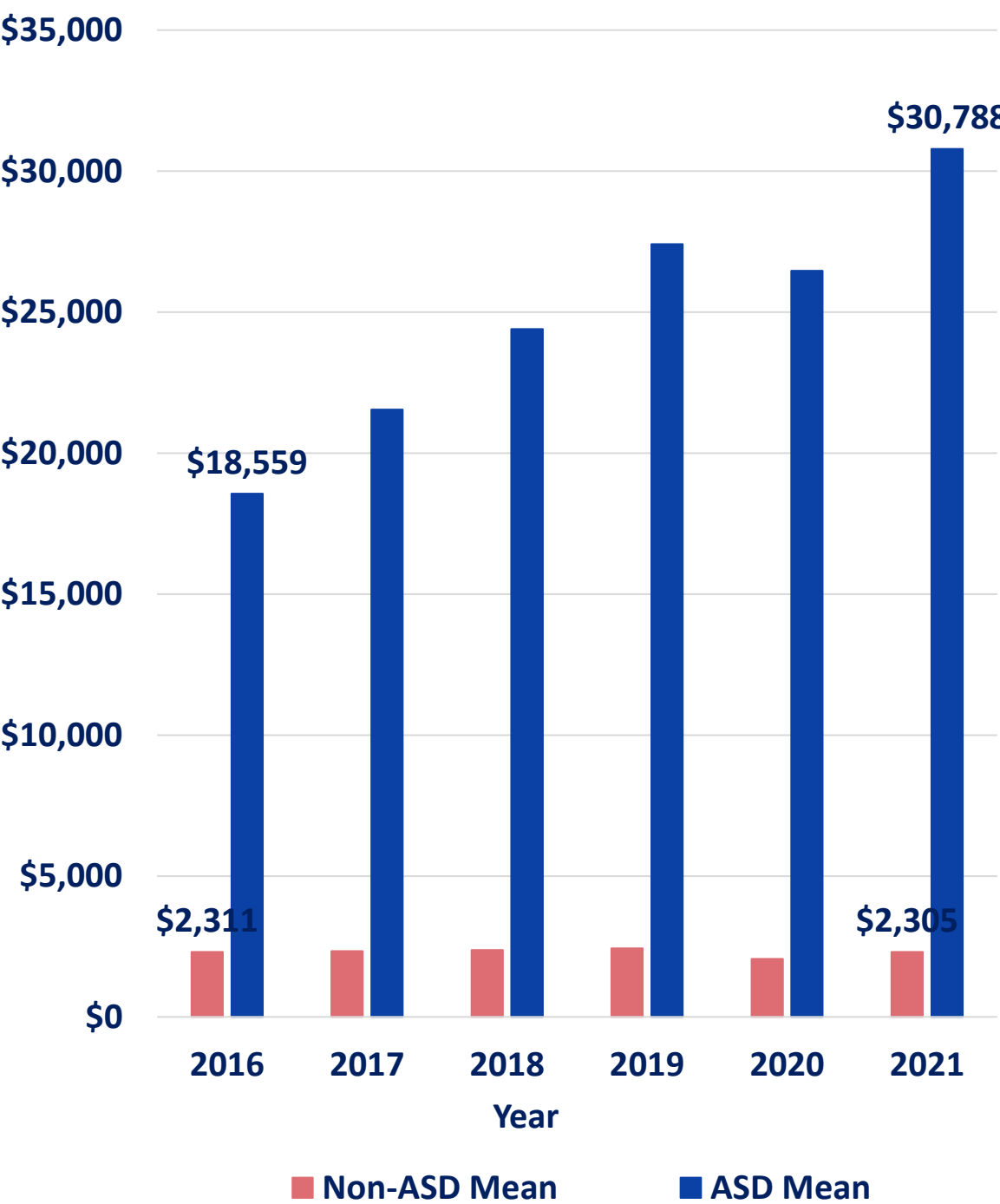
- Children with ≥2 ASD claims on separate dates within a calendar year

Analyses

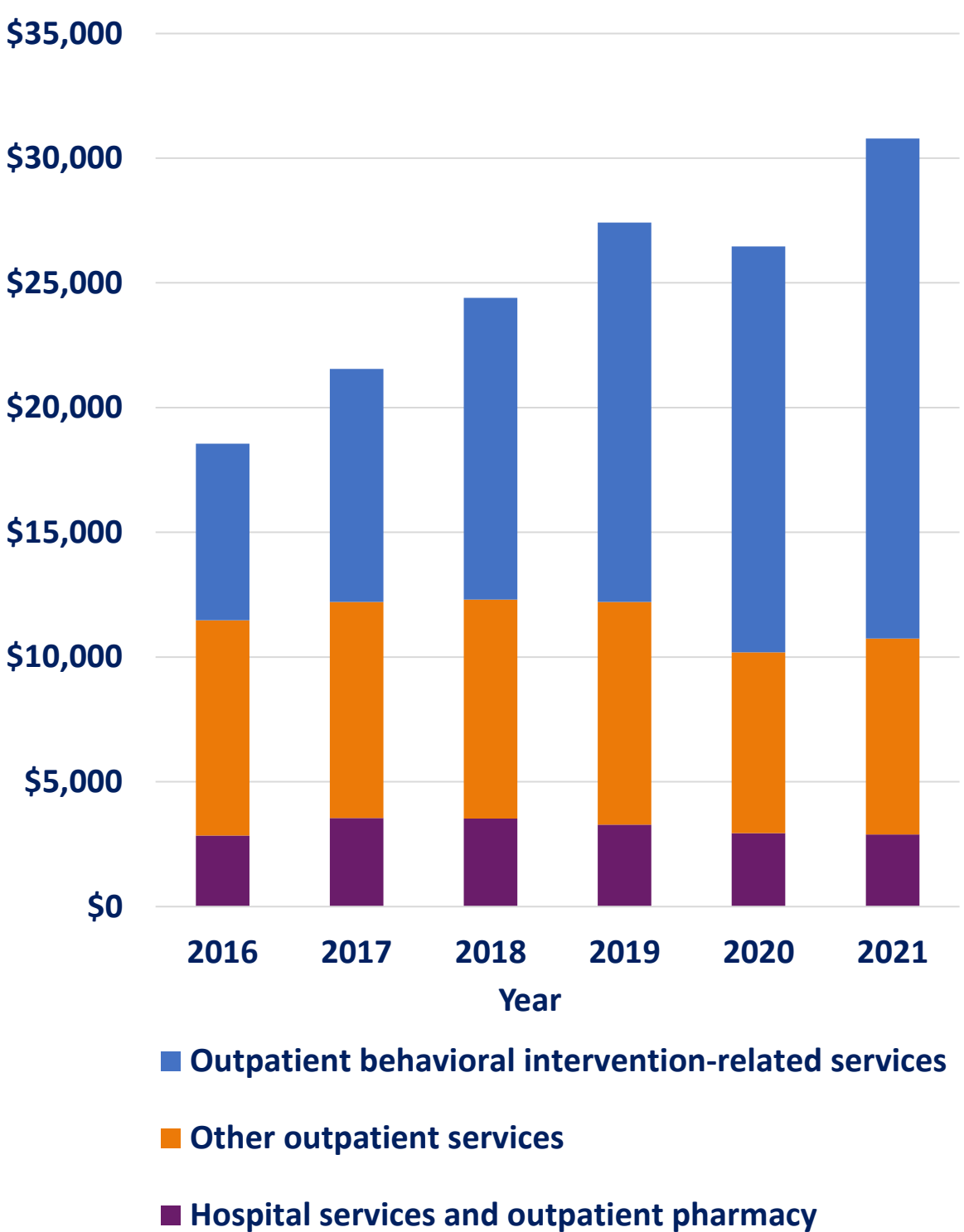
- Repeated cross-sectional analysis
- Estimated mean and median annual expenditures per child with and without ASD overall, and by type or place of services
- Estimated the proportions of children with ASD receiving behavioral intervention-related services for ≥30, ≥60, ≥90, and ≥180 days

Results

Mean spending per child for children aged 3–7 years, by calendar year, in 2021 US dollars



Mean spending per child by service type and setting for children aged 3–7 years with ASD, by calendar year, in 2021 US dollars



- Mean spending per child aged 3–7 years increased by 66% for children with ASD and decreased by 0.3% for those without ASD from 2016 to 2021.
- Mean spending on behavioral-related intervention services per child aged 3–7 years with ASD increased by 183% from 2016 to 2021.
- The percentage of children with ASD receiving behavioral intervention-related services for at least 180 days in a year increased from 4.8% in 2016 to 12.9% in 2021.
- The percentage of children with ASD receiving behavioral intervention-related services for at least 180 days in a year increased from 4.8% in 2016 to 12.9% in 2021. However, only a few children received behavioral intervention-related services for at least 180 days a year.

Limitations

- Only services reimbursed by employer-sponsored plans were included. Services for children with ASD may also be provided by schools or are paid directly by families or by public payers.
- Data only reflect children who met our relatively strict case definition.
- No information on socioeconomic status or race & ethnicity.

Conclusions

- Spending per child with ASD continued to grow rapidly after 2016, primarily driven by increased spending on behavioral intervention-related services.
- Children with ASD received less frequent behavioral intervention-related services.

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Disclaimer

- The data presented here are provisional and have not been published
- The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the CDC