Off-label Prescribing Trends for ADHD Medications in Very Young Children

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OBJECTIVE
This study examines off-label medication prescribing use and trends in children on Medicaid with ADHD with particular focus on the very young (under age 6 years).

METHODS
This was an observational cohort study and retrospective analysis of ADHD medication prescriptions from Oregon Medicaid records (N = 83,190) in 2012. Manufacturer prescribing information was used to determine off-label designation. Children ages 3 to 18 years at the time of prescription who had continuous Medicaid enrollment of at least 10 months during the index year of 2012 were included in the sample frame.

RESULTS
Children with ADHD were prescribed off-label medications primarily at the ages of 5 years and younger. Among children ages 3 to 5 years, 91.4% of prescriptions were off-label. After the age of 5 years, the percentage of off-label prescriptions dropped notably to 21%, reflecting the increase in availability of approved medications for the treatment of ADHD starting at age 6 years. In the 3- to 5-year-old age group, specific off-label and concerning medication-related observations included a high frequency of alpha agonist (e.g., guanfacine, clonidine) prescribing; the prescribing of untested formulations such as clonidine patches; prescribing of atomoxetine; and prescribing of large doses of stimulant medications.

CONCLUSIONS
Most ADHD drugs prescribed for very young children are off-label, which is concerning owing to lack of safety and efficacy data in this vulnerable population.