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**First theme choice:** Clinical/Behavioral/Intervention

***Building a Risk Adjusted Model for Monitoring Psychopharmaceutical Prescription for Children in the Child Welfare System***

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**Introduction:** Evidence suggests that children in the child welfare system are more likely to be prescribed psychotropic medications than are children in the general population. Although children in the welfare system may be more likely to have emotional and behavioral problems and therefore more likely to be prescribed psychotropic medications, concern has arisen about promoting safe, appropriate, and effective prescription of these medications in this vulnerable population.

**Methods:** Using administrative- and prescription-level child data and Administration on Children, Youth and Families guidelines, the primary outcome was defined as potentially inappropriate psychotropic prescriptions (i.e., red-flagged prescriptions). A hierarchical-logistic regression model was fit to account for case complexity and estimate the adjusted probability of a prescription being red-flagged. A funnel plot was used to visualize standardized prescribing rates for every prescriber and identify outlying prescribers.

**Results:** From May 2018 to January 2021, 1,301 prescribers issued 240,297 prescriptions for 10,109 children with a median (interquartile range) age of 14 (11-16) years. Most prescribers (84%) issued at least one red-flagged prescription, 4,371 (43.2%) children received at least one red-flagged prescription, and 110,242 (45.9%) prescriptions were red-flagged. The standardized prescribing rate for each prescriber was compared with a benchmark of 45.9%, defined a priori as the proportion of red-flagged prescriptions in the overall sample. One hundred and fourteen prescribers (8.8%) prescribed red-flagged prescriptions between two and three standard deviations above the benchmark, and 258 prescribers (19.8%) more than three standard deviations above the benchmark.

**Discussion:** It is vital to monitor psychotropic prescriptions for children in the child welfare system. Quantifying variability in prescribing practices among prescribers for these children might be used to guide oversight.

**Keywords:**

Statistical profiling, Child welfare, Psychotropic medication monitoring