

# Research Project Brief

## PROJECT | Ambulatory Prescription Opioid Exposures in Children and Youth with Special Healthcare Needs

- *Term: 2017 - 2018*
- *Grantee: CYSHCN and Eunice Kennedy Shriver National Institute of Child Health & Human Development*
- *Sub-recipient: Boston Children's Hospital*
- *Funding Agency: Health Research Services Administration, MCH Research Networks Program; Eunice Kennedy Schriver National Institute of Child Health and Human Development - Grant Number: HRSA-17-060-147599, Schriver-K23HD091295*

**Background** | Although potentially dangerous, little is known about ambulatory opioid exposure (OE) in children and youth with special healthcare needs (CYSHCN). We assessed the prevalence and types of OE, and the diagnoses and healthcare encounters proximal to OE in CYSHCN.

Retrospective cohort study of 2,509,453 CYSHCN aged 0-to-18 years from 11 states, continuously enrolled in Medicaid in 2014, with >1 chronic condition. OE included any filled prescription (single or multiple) for opioids. Healthcare encounters were assessed within 7-days before and 7- and 30-days after OE.

Among CYSHCN, 8.1% had OE. CYSHCN with vs. without OE were older, had more chronic conditions, and had more polypharmacy. Most (67.1%) OE were single fills with a median duration of 5 days. The most common OEs were acetaminophen-hydrocodone, acetaminophen-codeine, and acetaminophen-oxycodone. Emergency department visits preceded 30.2% of OEs, followed by outpatient surgery, and primary care. Most OEs were preceded by a diagnosis of infection or injury. Only 33.4% and 60.8% of OEs were associated with follow-up visits within 7- and 30-days, respectively.

OE in CYSHCN is common, especially with multiple chronic conditions and polypharmacy. Subsequent studies should examine the appropriateness of opioid prescribing, particularly in EDs, as well as to assess for drug interactions with chronic medications, and reasons for insufficient follow-up.

**Potential Impact** | This study hopes to understand the clinical characteristics of CYSHCN who receive prescription opioids, as well as the types of healthcare utilization preceding and following prescription of an opioid.



**James A. Feinstein,  
MD, MPH**  
Principal Investigator

### Publication

Feinstein JA, Rodean J, Hall M, et al. Outpatient Prescription Opioid Use in Pediatric Medicaid Enrollees With Special Health Care Needs. *Pediatrics*. 2019;143(6)

<https://pediatrics.aappublications.org/content/143/6/e20182199>

**Organizations Involved**  
University of Colorado,  
Denver