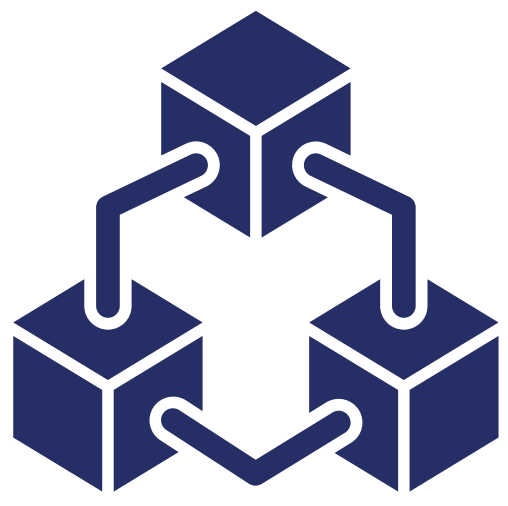


## BACKGROUND



- Real-world data (RWD) may improve medication safety studies in the pediatric population
- Sentinel Initiative maintains a distributed database (SDD) at Data Partners which provides access to high-quality RWD

as well as scientific and technical expertise.

- SDD primarily administrative claims data; ~800 million person-years

## OBJECTIVE



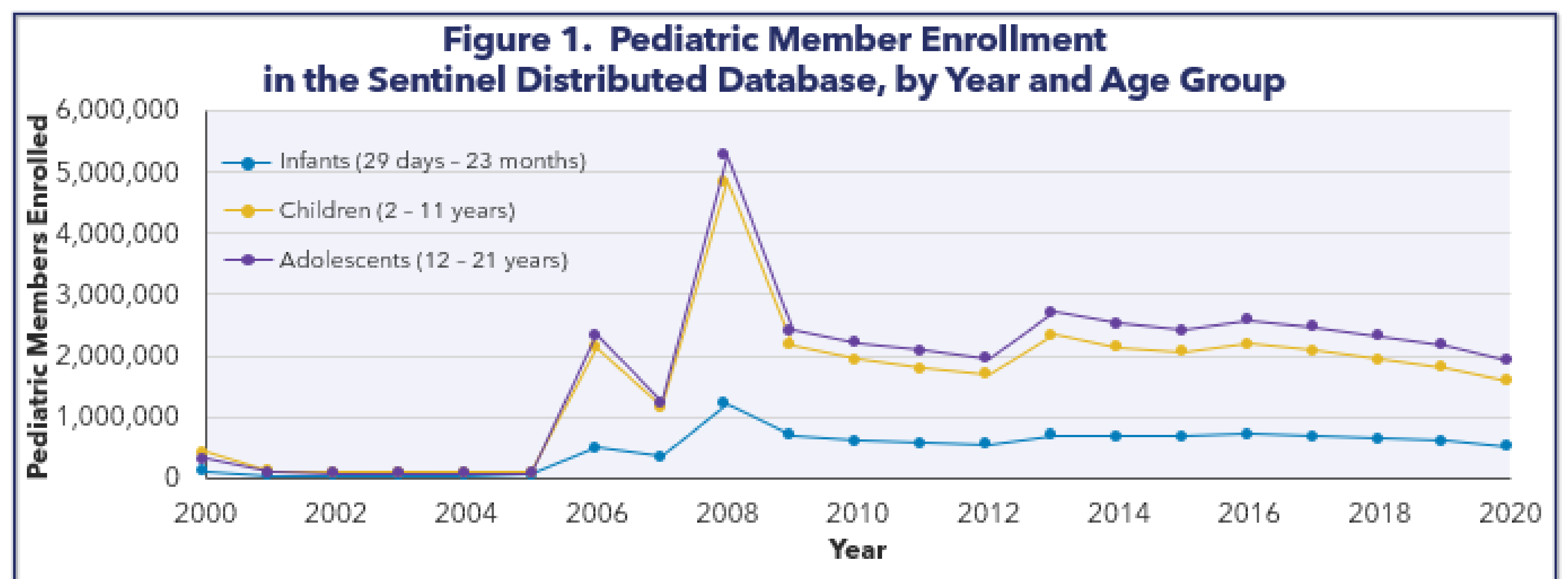
**Describe** demographics, enrollment, and health characteristics among pediatric members in the SDD

## METHODS

- Population:** SDD members aged **29 days through 21 years** during their first year in each age group (first-year point prevalence) from 2000-2020
  - Infants:** 29 days – 23 months;
  - Children:** 2 – 11 years;
  - Adolescents:** 12 – 21 years
- Required  $\geq 1$  day of both medical and prescription drug coverage
- Programmed using *Cohort Identification and Descriptive Analysis module*, version 10.3.1
- Outcomes:** Demographics, enrollment, health conditions, healthcare utilization intensity, prescription medication use
- Statistical Analysis:** descriptive statistics (mean/standard deviation or count/percentage)
  - No formal statistical comparisons since analysis was descriptive

## RESULTS

- Volume of pediatric enrollees in the SDD from 2000-2020 ranged from about 10- to about 38 million, depending on age group
- Minimal enrollment before 2006; highest in 2008 and fairly stable from 2013-2020
- Composition of pediatric members by age group relatively constant over time (~14% infants, ~42% children, ~44% adolescents)
- Pediatric members continuously enrolled for median of 16.9 (IQR 7.5 – 35.9) months

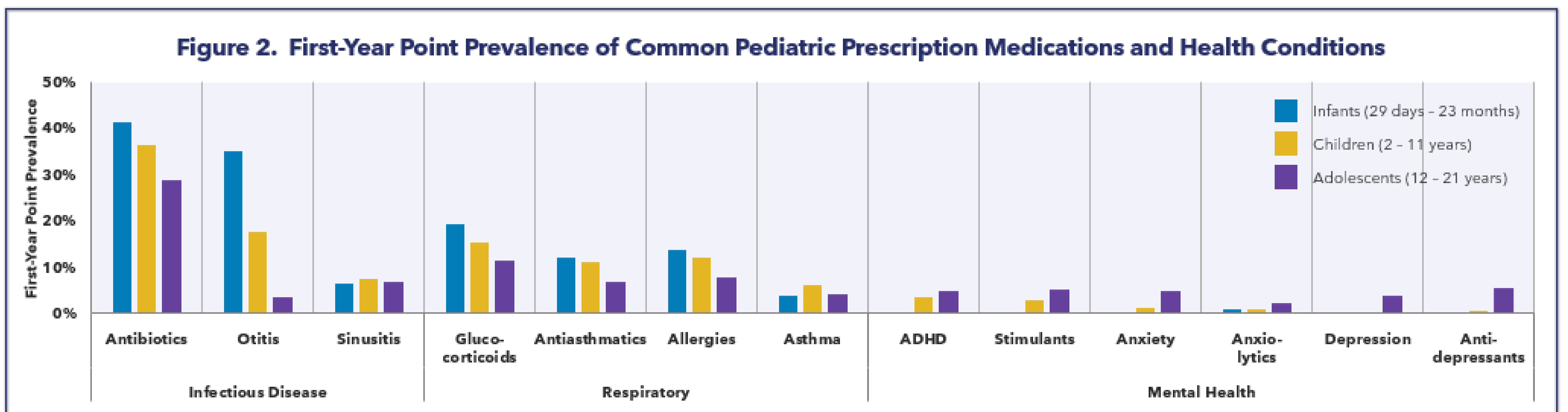


**Table 1. Demographics and Healthcare Utilization Among Pediatric Members in the Sentinel Distributed Database**

<b>Ever enrolled, N (%)</b>	10,273,860	33,247,274	37,925,029
<b>Known Race, N (%)</b>	881,027 (8.5)	2,709,211 (8.1)	3,049,895 (8.0)
<b>Non-White Race, N (% of Known)</b>	276,518 (31.9)	778,959 (28.7)	807,091 (26.5)
<b>Female, N (%)</b>	5,001,985 (48.7)	16,247,762 (48.9)	18,640,296 (49.2)
<b>Mean (SD) annual number of:</b>			
<b>Ambulatory encounters</b>	7.6 (7.1)	3.7-4.4 (7.2-7.5)	3.5-4.2 (6.8-7.4)
<b>Dispensed prescriptions</b>	2.9 (8.7)	2.4 (4.5-5.2)	3.0-3.9 (6.5-7.5)
<b>Dispensed drug classes</b>	1.6 (2.0)	1.2-1.4 (1.8-1.9)	1.4-1.7 (2.1-2.5)

- Healthcare utilization peaks in infancy, led by ambulatory office visits
- Most common of assessed health conditions was allergies (11.5-13.8% of infants and children; 6.4-9.1% of adolescents)
- Mental health conditions outpace respiratory and infectious disease conditions during adolescent years
- Prescription medication use parallels health conditions

**Figure 2. First-Year Point Prevalence of Common Pediatric Prescription Medications and Health Conditions**



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