

Characterizing Infants in the Sentinel Distributed Database Mother-Infant Linkage Table

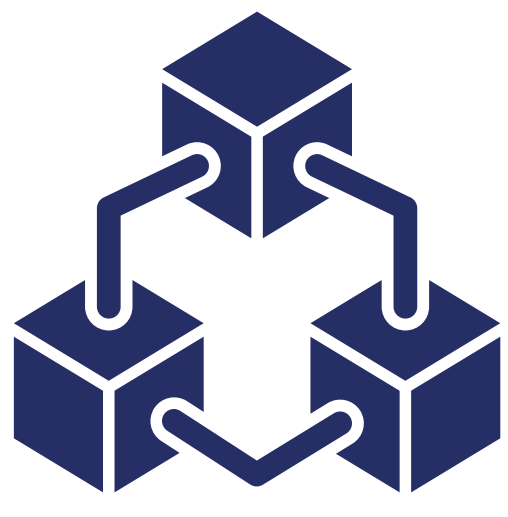
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BACKGROUND



- Gaps in insurance coverage from birth until enrollment and the need to track neonatal outcomes after prenatal drug exposure necessitate linkages between mothers and their babies
- US F.D.A.'s Sentinel Distributed Database (SDD) contains a Mother-Infant Linkage (MIL) table, but infant characteristics have yet to be described

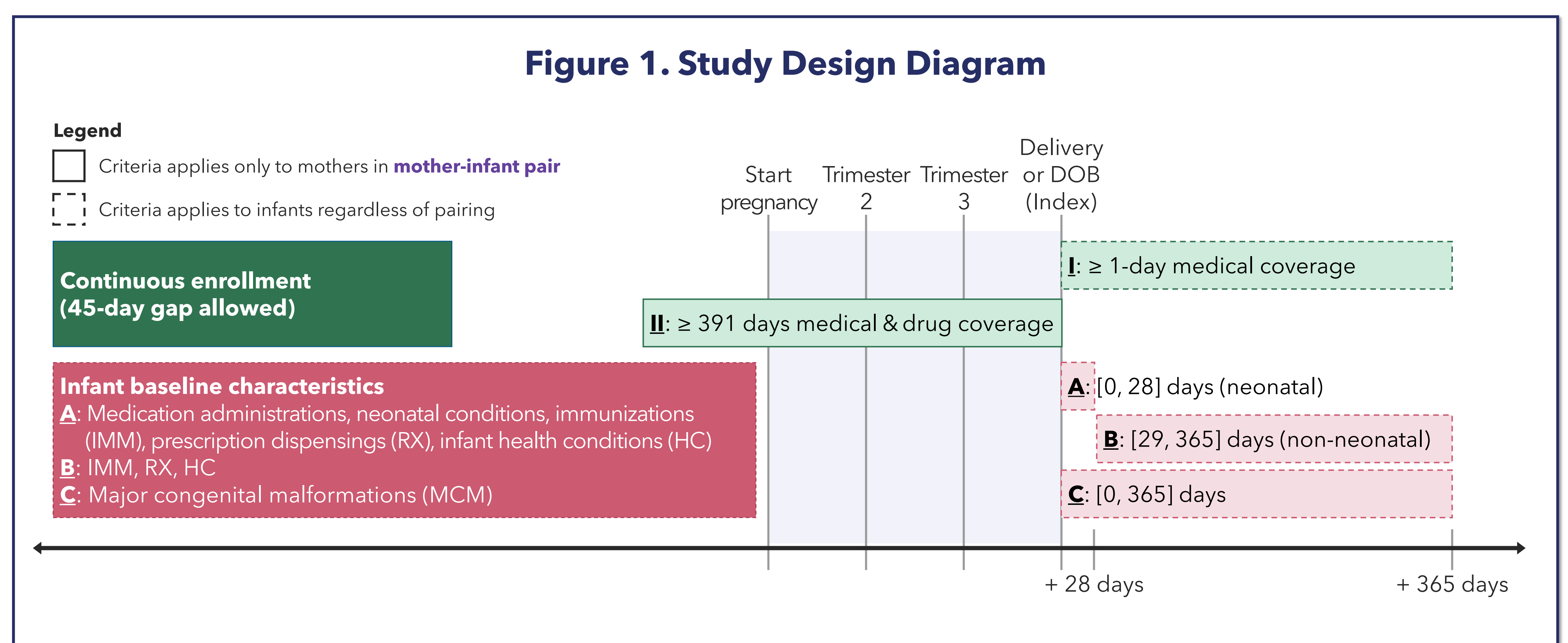
OBJECTIVE



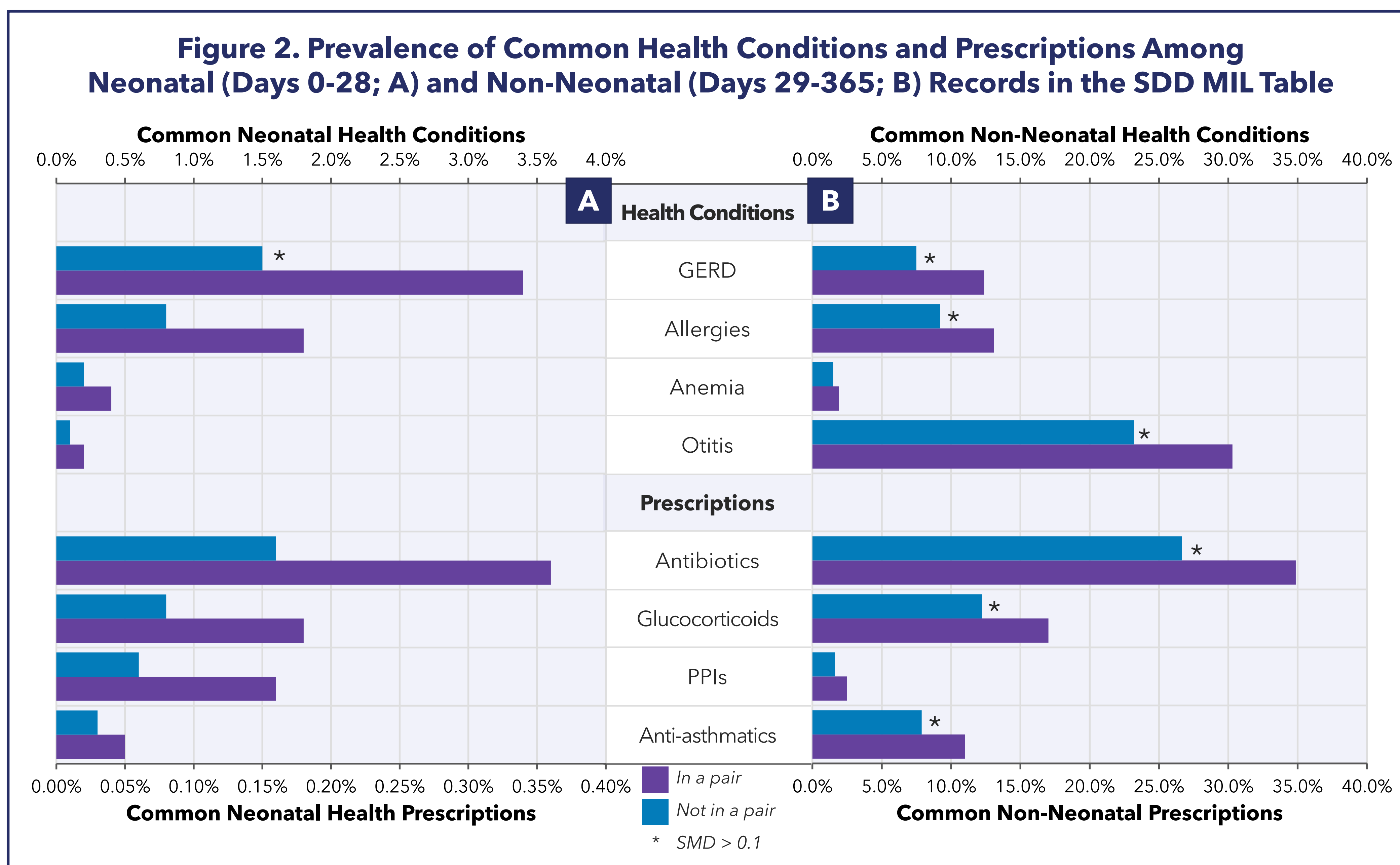
- Describe** demographics, enrollment, and health characteristics among infants in the SDD's MIL table, regardless of pairing with a mother
- Compare** prevalence of certain health conditions and prescription dispensings among neonates in a pair when identified in neonate record alone vs. mother + neonate record

METHODS

- Population:** Infant members in SDD's MIL Table from 2000-2021¹
 - Two cohorts: **"In a pair"** (i.e. infant delivery linked to mother record) and **"Not in a pair"** (i.e. no linked delivery)
- Cohort Identification and Descriptive Analysis module**, version 10.3.1
- Statistical Analysis:** Descriptive statistics; variation quantified w/standardized mean differences (SMDs)
 - No formal statistical comparisons since analysis was descriptive

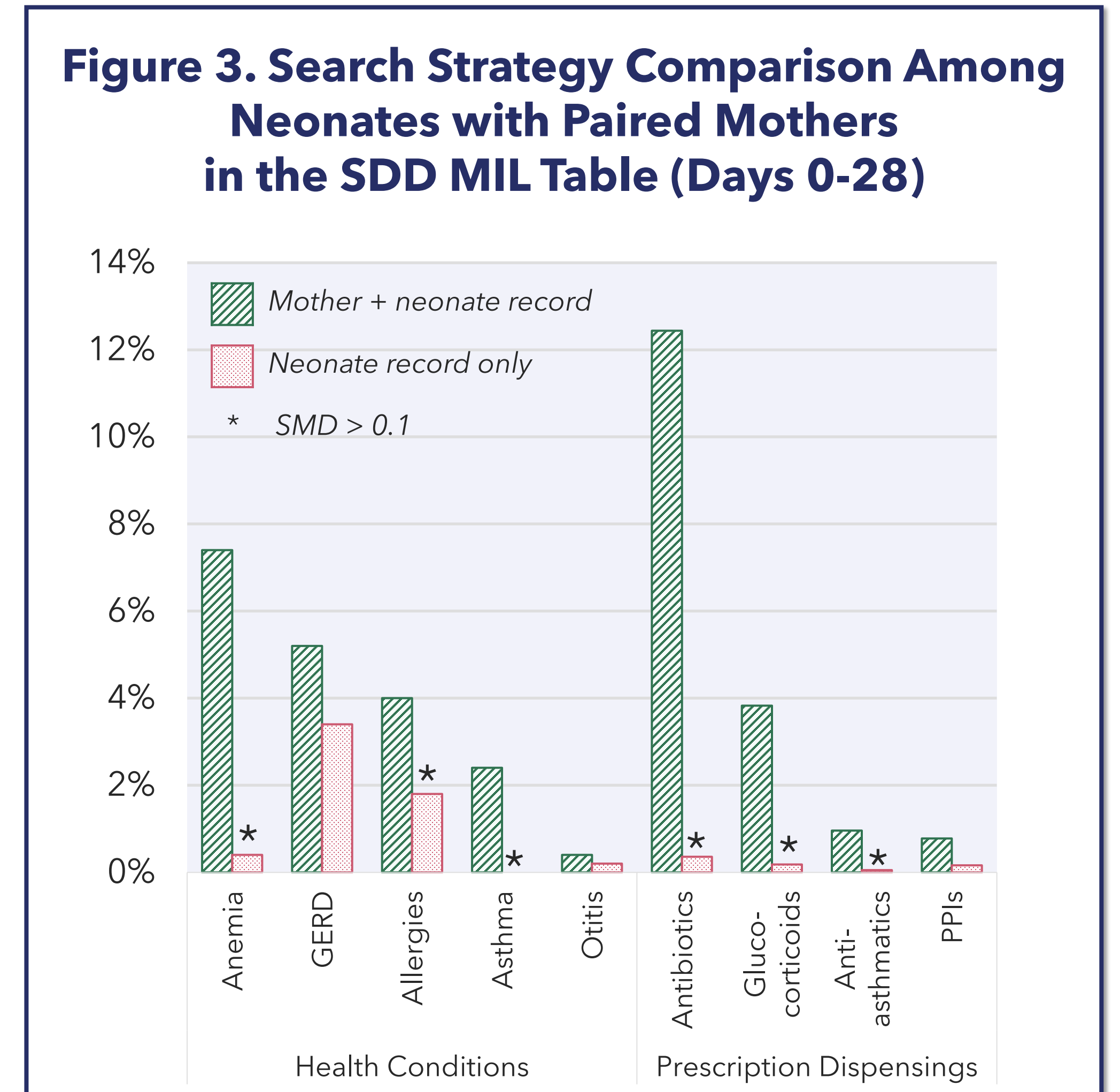


RESULTS



- Neonatal HCs 10x more common than neonatal RXs (regardless of whether they were paired to mother)
- Non-neonates paired to mothers had more RXs and HCs compared to non-neonates not in a pair
- Adding mother's record to neonatal characteristic identification significantly increased evidence of antibiotic and opioid administrations (not shown), most RXs, and 6 of the 22 common health conditions
- MCMs recorded in the first year were similar regardless of pairing status (all SMD < 0.05; data not shown)

- Identified 6,131,472 infants in the SDD MIL tables
 - 2,868,310 infants **in a mother-infant pair** (53.2% **not in a pair**)
- 49.3% of infants are female; 92.0% unknown race
- 61.9% of infants ≥ 1-year continuous enrollment
- Mean (SD) days from birth to enrollment was **3.3 (35.0)** for infants **in a pair** and **84.6 (121.5)** days for those **not in a pair**



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- ¹ For more information on the Mother-Infant Linkage Table, see: sentinelinitiative.org/methods-data-tools/sentinel-common-data-model/mother-infant-linkage-table

