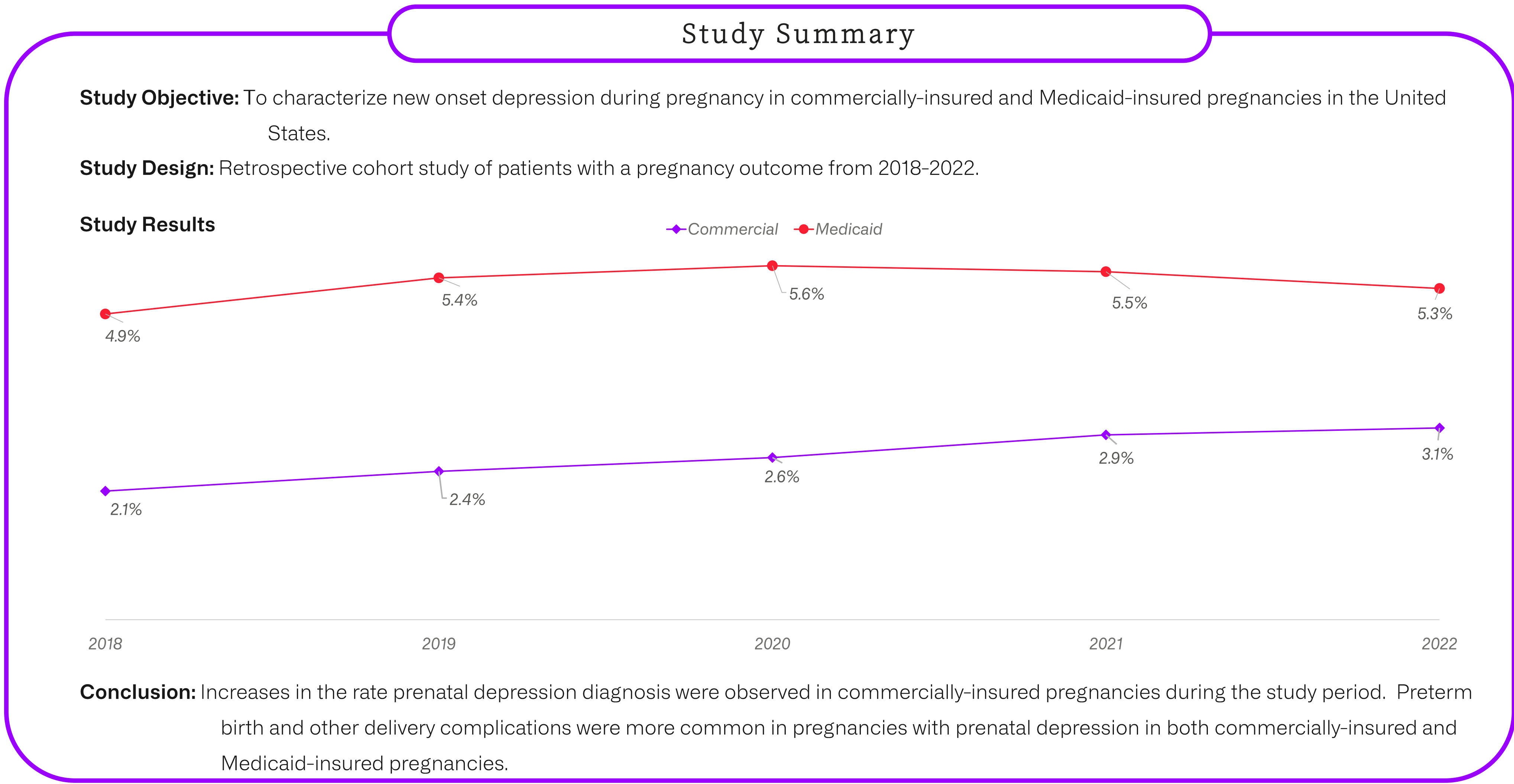


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Background

- Depression is a common psychiatric disorder during the perinatal period. Patients are at risk for the development of mental health disorders during the perinatal period, including perinatal depression.¹
- Perinatal depression is characterized by a major depressive episode in the prenatal or postpartum period and includes both prenatal depression and postpartum depression.²
- Though the estimated prevalence of prenatal depression in the U.S. is similar to the estimated prevalence of postpartum depression,^{3,4} studies of perinatal depression often focus on postpartum period.
- Prenatal depression is also an important risk factor for postpartum depression and has been associated with negative impacts on child development.⁴

Objective

- To characterize new onset depression during pregnancy in commercially-insured and Medicaid-insured pregnancies.

Methods

Study Design and Data Source

- This study employed a retrospective observational cohort design within the Merative™ MarketScan® Commercial Claims and Encounters Database and Multi-State Medicaid Database.
- The MarketScan data was accessed using Treatment Pathways 4.0, an online analytic platform, to identify patients with a pregnancy outcome between 1 January 2018 and 31 December 2022 (Figure 1).
- Pregnancies included in the study were required to have continuous enrollment for 480 days prior to the delivery date. The 300 days prior to the delivery were considered the prenatal period and 180 days prior to the prenatal period were considered the pre-pregnancy period.

Outcomes

- Prenatal depression was identified in patients with a non-diagnostic medical claim for depression, adjustment, or mood disorders, during the prenatal period.
- Patient characteristics, preterm delivery, and delivery complications were measured on the date of the pregnancy outcome.
- Chi-square tests were conducted to compare patient characteristics and outcomes. A p-value <0.001 was considered statistically significant.

Results

- In total 601,170 commercially-insured and 458,372 Medicaid-insured deliveries were included in this study. During the study period, the rate of prenatal depression diagnosis was higher in Medicaid-insured pregnancies (5.3%) than in commercially-insured pregnancies (2.6%).
- The rate of prenatal depression diagnosis increased from 2.1% in 2018 to 3.1% in 2022 in commercially-insured pregnancies. The rate of prenatal depression in Medicaid-insured pregnancies was highest in 2020 (5.6%) and lowest in 2018 (4.9%). (Summary Figure)
- In commercially-insured pregnancies, prenatal depression diagnosis was more common in patients <25 and 35 or older (p<.0001). In Medicaid-insured pregnancies, prenatal depression diagnosis was more common patients <18 and less common in patients 35 or older (p<.0001). (Figure 2)

Figure 1. Patient Selection

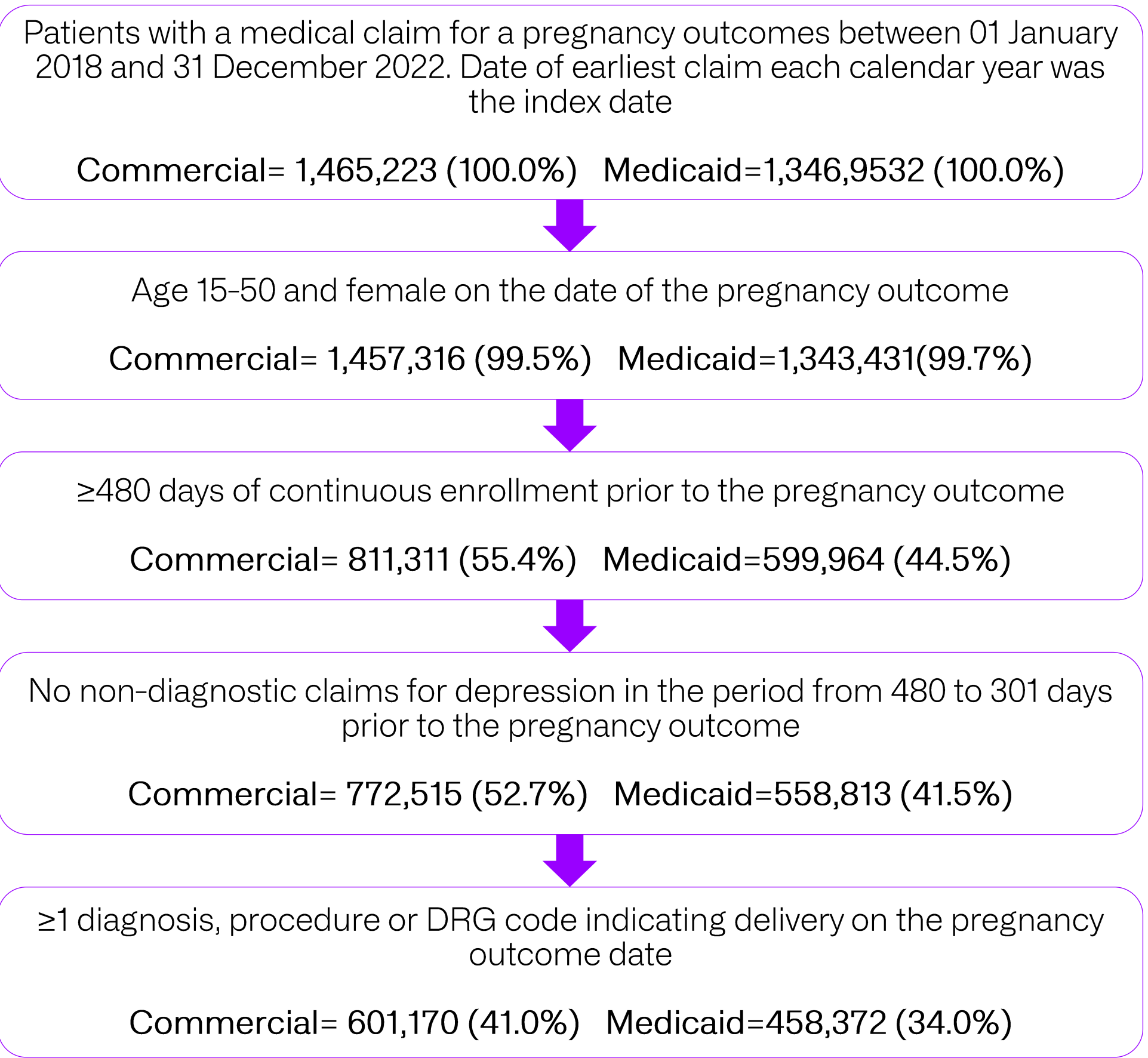


Figure 2. Age Distribution of Pregnancies with and without Prenatal Depression Diagnosis

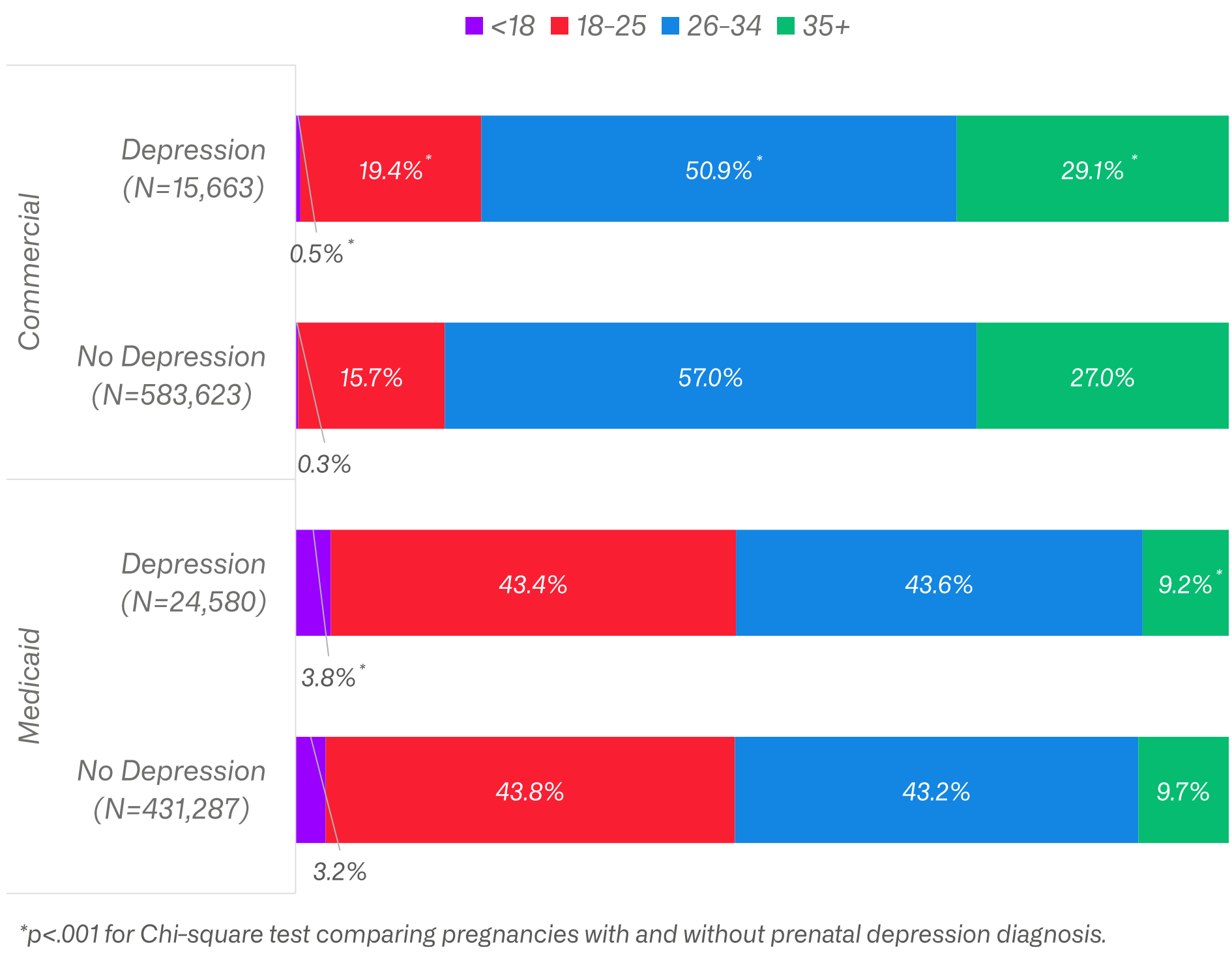
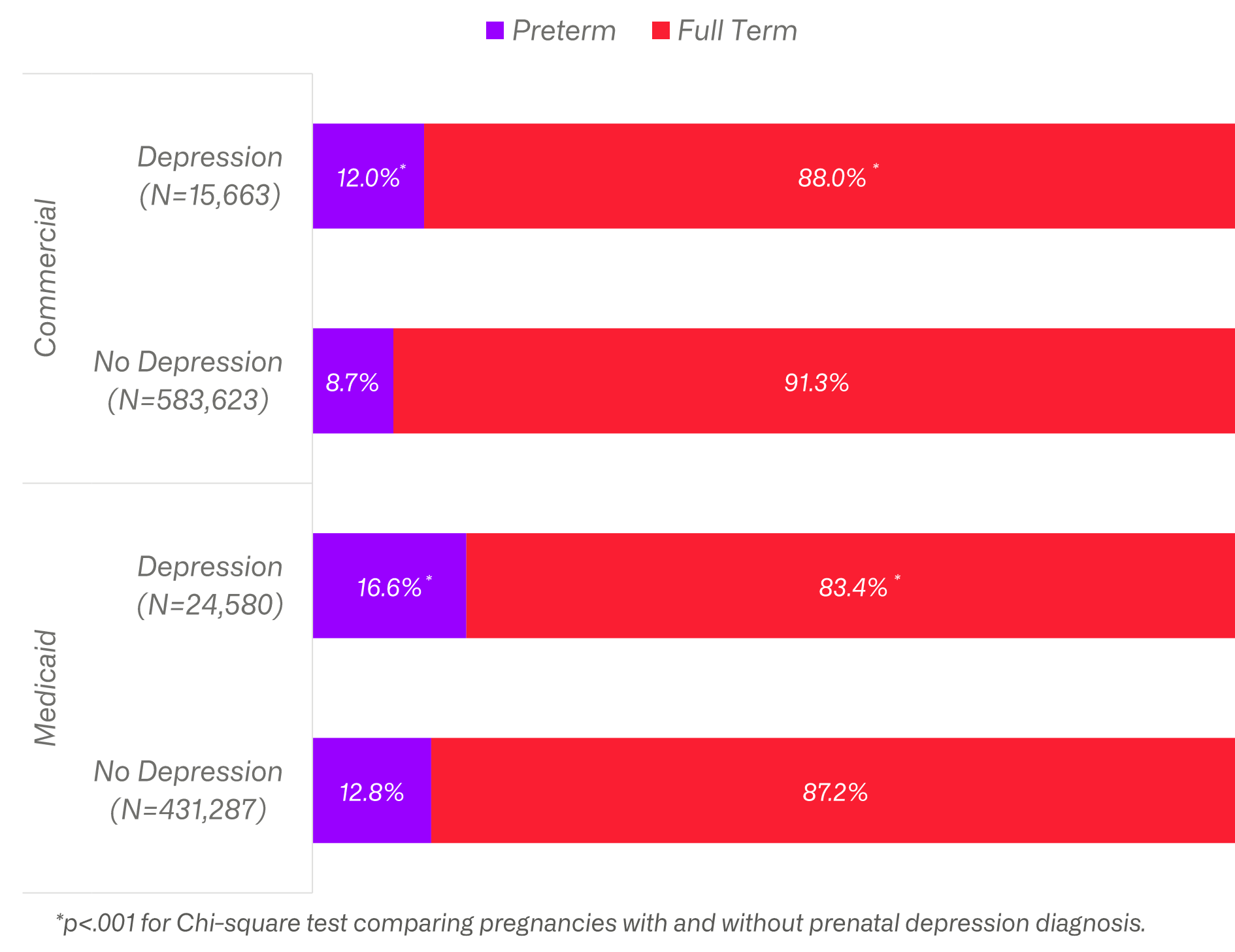


Figure 3. Preterm Delivery in Patients with and without Prenatal Depression Diagnosis



Results (cont.)

- Preterm delivery was more common in pregnancies with diagnosed prenatal depression (Commercial: 12.0% vs. 8.7%, p<.0001; Medicaid: 16.6% vs. 12.8%, p<.0001). (Figure 3)
- Presence of any delivery complication was more common in pregnancies with diagnosed prenatal depression (Commercial: 27.6% vs. 24.8%, p<.0001; Medicaid: 26.2% vs. 24.4%, p<.0001). (Figure 4)
- In the Medicaid population, placental complications (11.2% vs. 9.9%) and fetal distress (5.3% vs. 4.2%) were more common in pregnancies with diagnosed prenatal depression (p<.0001). In the Commercial population, placental complications(10.3% vs. 8.6%), hemorrhage (5.9% vs. 4.9%), and fetal distress (4.8% vs. 3.8%) were more common in pregnancies with diagnosed prenatal depression (p<.0001). (Figure 4)

Limitations

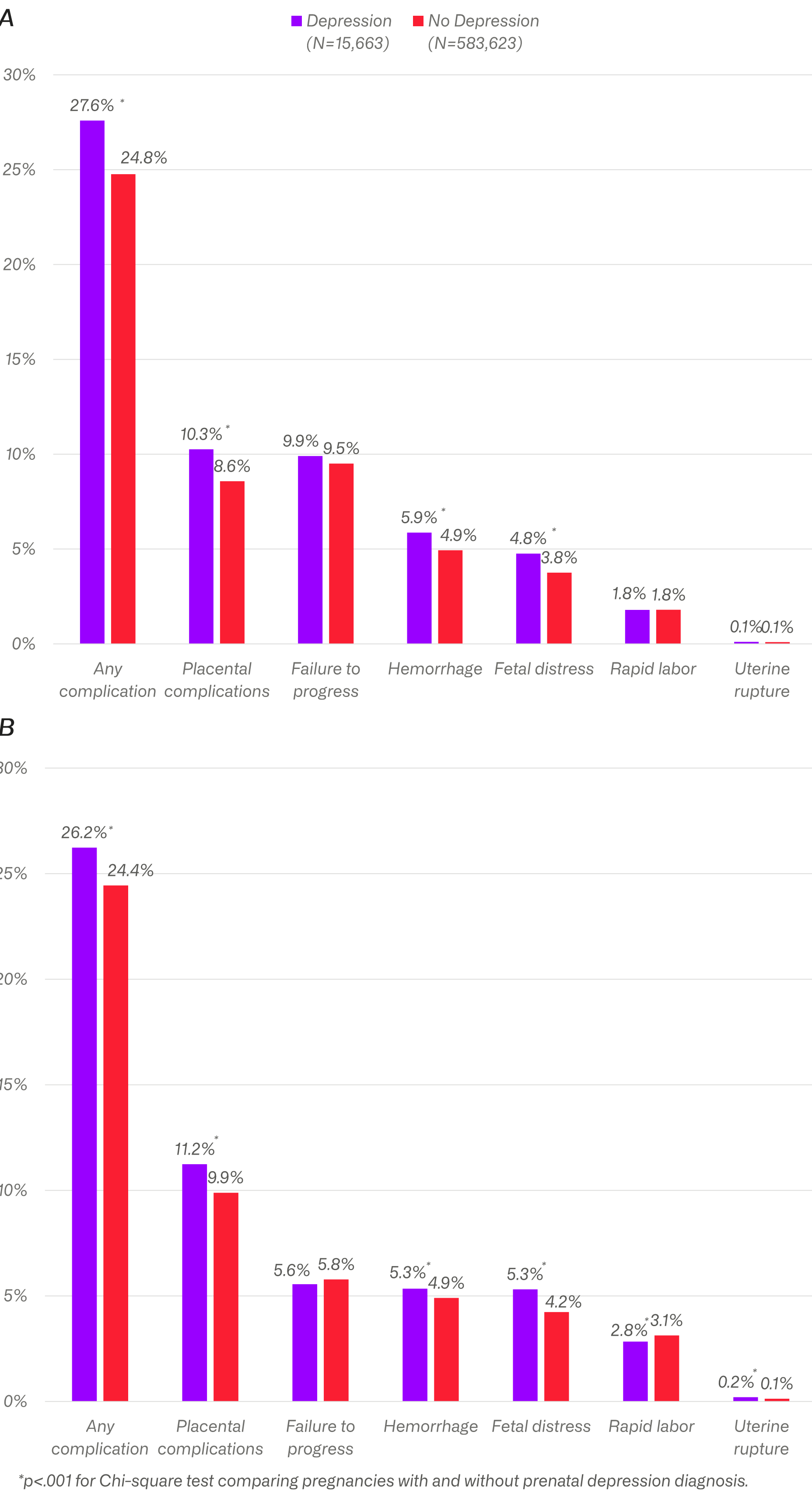
This analysis has conventional limitations of claims-based analyses:

- This study was based on pregnancies with commercial or Medicaid health coverage, and results may not be generalizable to pregnancies with other types of insurance or without health insurance coverage.
- Depression severity is not captured in this administrative claims database and thus may impact this study's ability to identify patients with depressive symptoms during pregnancy without a diagnosis of prenatal depression.

Conclusions

- Increases in the rate prenatal depression diagnosis were observed in commercially-insured pregnancies during the study period.
- Preterm birth and delivery complications, including placental complications and fetal distress, were more common in pregnancies with diagnosed prenatal depression in both commercially-insured and Medicaid-insured pregnancies.

Figure 4. Delivery Complications in Patients with and without Prenatal Depression Diagnosis (A) Commercial (B) Medicaid



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Disclosure

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