

Severe Maternal Morbidity and Comorbidity Burden Among Transgender and Gender Nonconforming Birthing Patients

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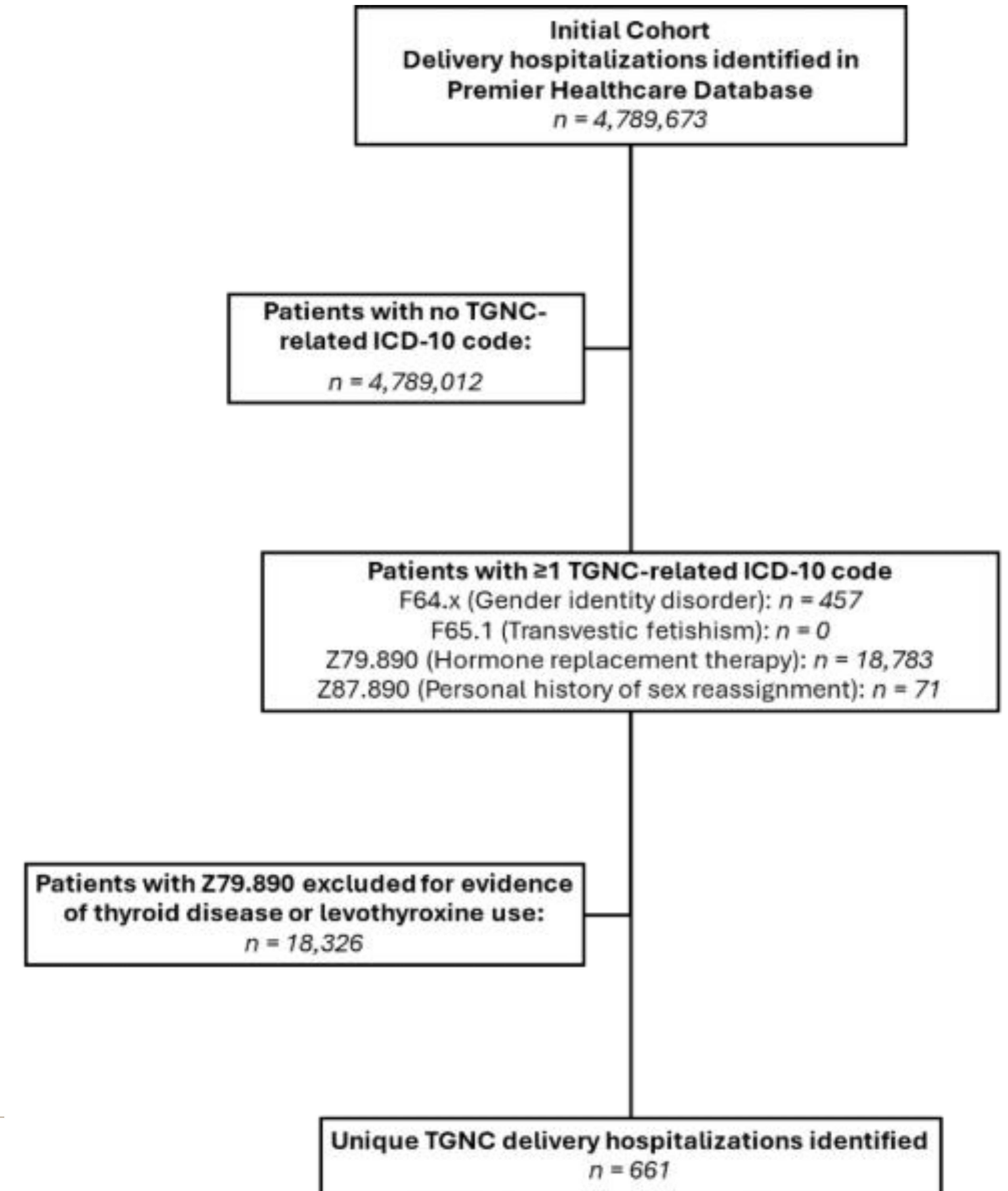
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Background & Hypothesis

- Transgender and gender nonconforming (TGNC) patients are a vulnerable subset of the obstetric population
- TGNC is associated with ↑ risk for sexually transmitted infections, mental health distress, and substance use disorders, which may confer ↑ pregnancy risk¹
- Pregnancy-related health risks among TGNC patients remain poorly defined
- Studies are mixed, with some demonstrating no increased maternal morbidity and others highlighting disparities in patient-reported outcomes, postpartum mental health, and access to appropriate care^{2,3,4,5,6}.
- We sought to describe comorbidities and maternal morbidity outcomes among TGNC birthing patients. **We hypothesized that TGNC patients have higher prevalence of cardiovascular disease (CVD) risk factors and maternal morbidity.**

Study Design & Methods

- Retrospective cohort
- Premier Healthcare Database (2016–2020)
- TGNC identified via ICD codes and medication administrations
- Primary outcome: rate of severe maternal morbidity (SMM) and non-transfusion SMM among TGNC versus non-TGNC birthing patients
- Multivariable logistic regression models estimated associations between TGNC status and outcomes
- Adjusted for age, payor status, and obstetric comorbidity index



Results

- 661 TGNC, 4,789,012 non-TGNC
- TGNC patients had higher prevalences of:
 - gestational diabetes (9.8% vs. 8.0%)
 - pre-existing diabetes (3.6% vs. 1.5%)
 - asthma (8.2% vs. 5.0%)
 - chronic hypertension (3.8% vs. 3.4%)
 - substance use disorder (9.2% vs. 6.4%)
 - mental health disorders (17.9% vs. 7.1%)
- Rates of SMM and non-transfusion SMM were higher among TGNC patients, but not significantly so

	TGNC (per 10,000 births)	Non- TGNC (per 10,000 births)	Odds ratio (95% CI)	P-value
SMM	197	147	1.04 (0.59, 1.84)	0.881
Non- transfusion SMM	91	39	1.42 (0.60, 3.33)	0.427

Conclusion & Discussion

- We developed a computable phenotype to identify TGNC birthing patients using structured administrative data^{1,2}
- Adjusted differences in SMM were not statistically significant
- TGNC birthing patients exhibited higher rates of cardiovascular and mental health comorbidities, established contributors to adverse perinatal outcomes.
- As one of the largest studies of TGNC obstetric patients, we demonstrated elevated chronic disease burden in these patients prior to and persisting into pregnancy.
- Future research should examine mechanisms for this increased cardiometabolic risk, including gender-affirming hormone use, chronic stress, and barriers to accessing gender-affirming care, to seek interventions to improve perinatal and healthcare equity.

References:

