

Joanna Zhou¹, Bianca Varney^{1,2}, Chrianna Bharat¹, Louisa Degenhardt¹, Nicola R. Jones¹, Alys Havard^{1,2}, Duong T. Tran¹

The Difference is Research

Background

- Opioid agonist treatment (OAT) using **methadone or buprenorphine** is the gold standard for managing opioid use disorder¹
- Women giving birth are recommended to **continue OAT after childbirth**²
- However, there is a paucity of research into OAT retention after childbirth

Aims

- Quantify** retention in OAT at 90 days, 180 days and 365 days following childbirth
- Examine retention variation** according to sociodemographic, OAT, maternal health and birth outcome characteristics

Methods

We linked OAT data to perinatal records for births between **01 Jan 2004 and 31 March 2020** in New South Wales (NSW).

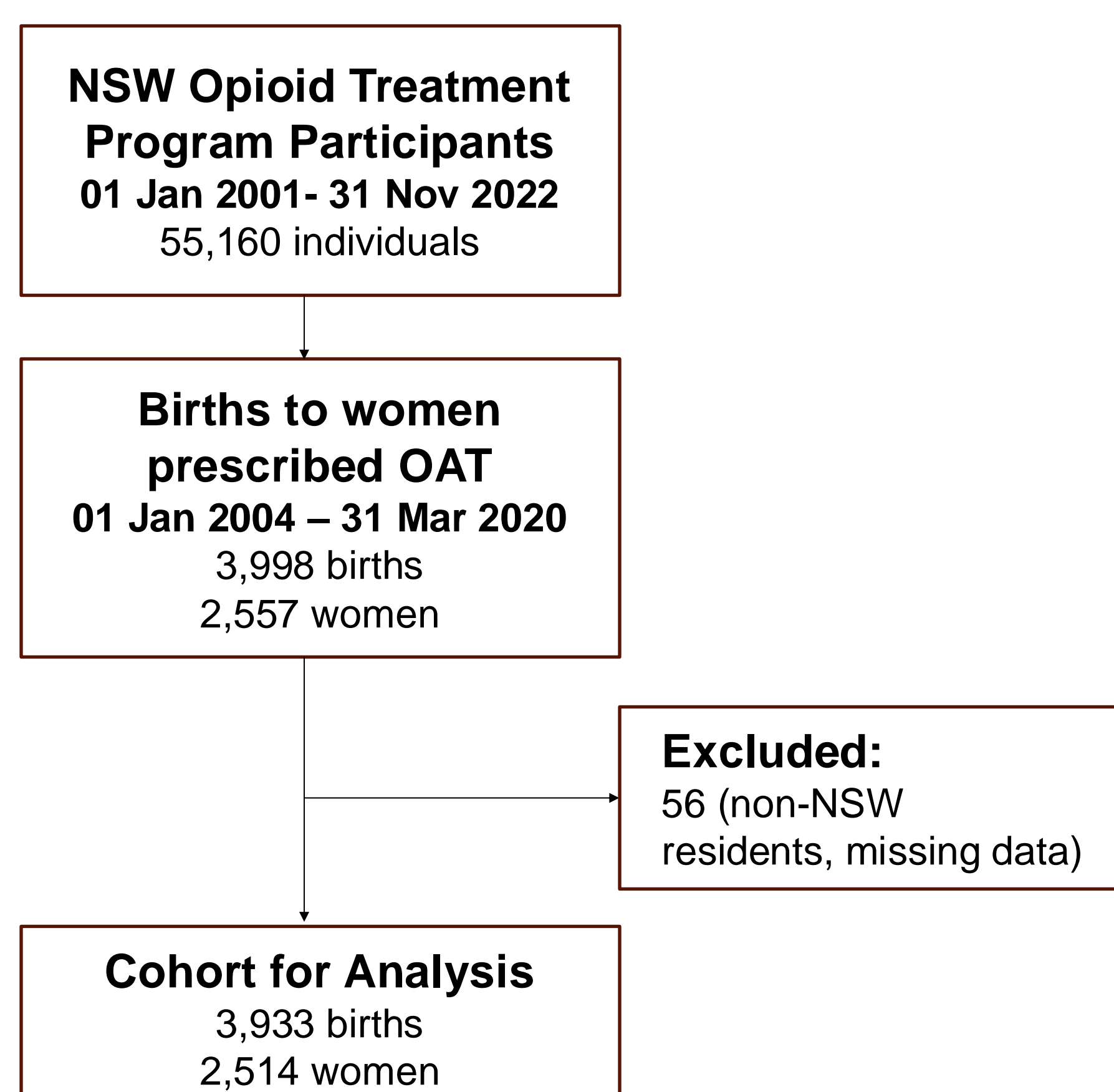
Outcome:

- We defined retention as **continuous OAT** (no break ≥ 7 days, except no break ≥ 37 days for buprenorphine in custody since September 2019) in 90 days, 180 days and 365 days after childbirth
- Follow-up was **censored** if the woman **died or conceived** in the respective timeframe

Statistical Analysis

- Childbirths** were the unit of analysis
- We calculated **proportions** of childbirths to women retained at 90days, 180days and 365days
- We calculated **crude and adjusted odd ratios** (OR) and 95% CI using **generalised linear modelling**, adjusting for multiple childbirths per woman

Figure 1: Cohort Selection



Results

Cohort Characteristics

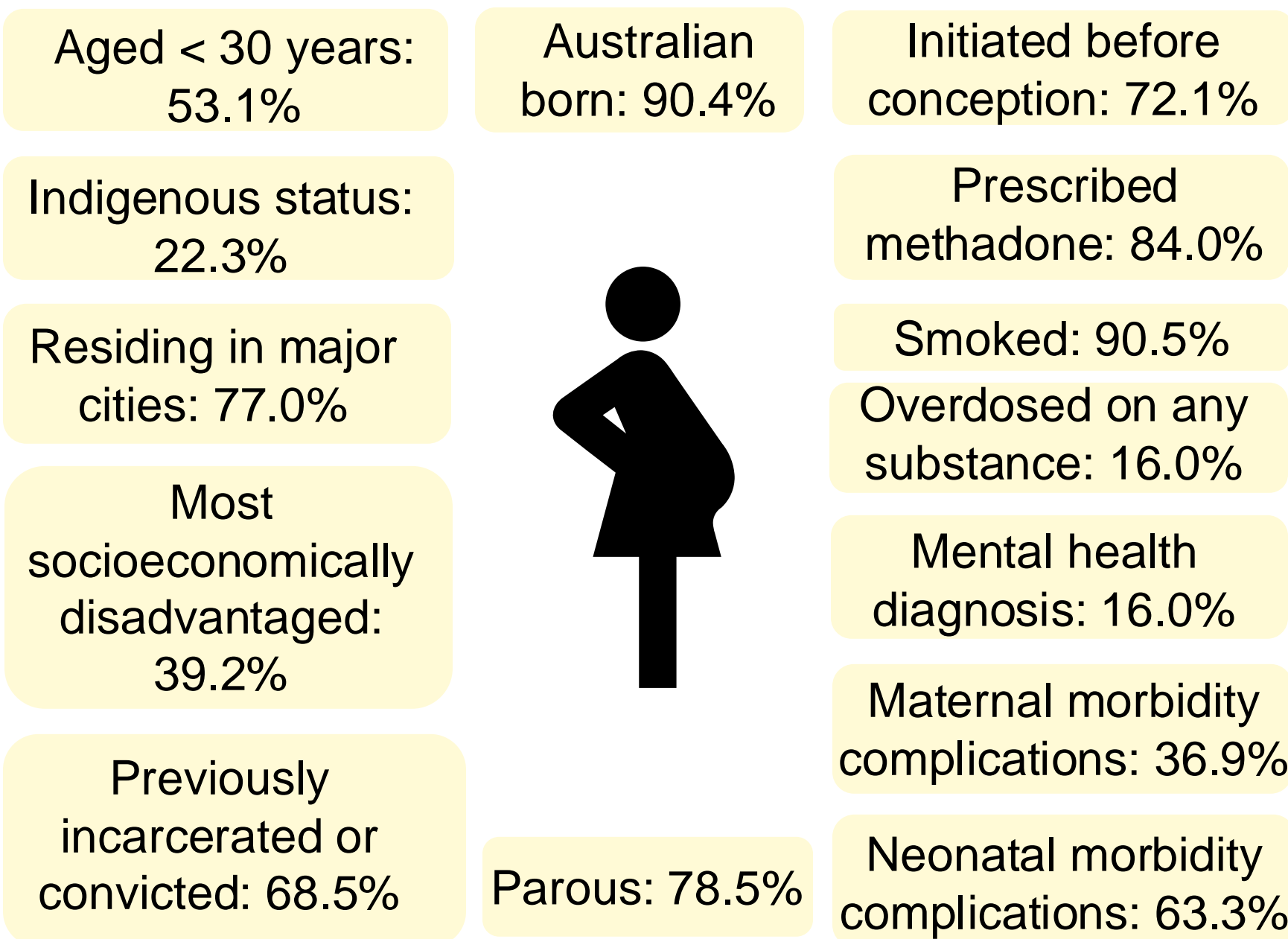


Figure 2: Retention in OAT 90 days, 180 days and 365 days after Childbirth

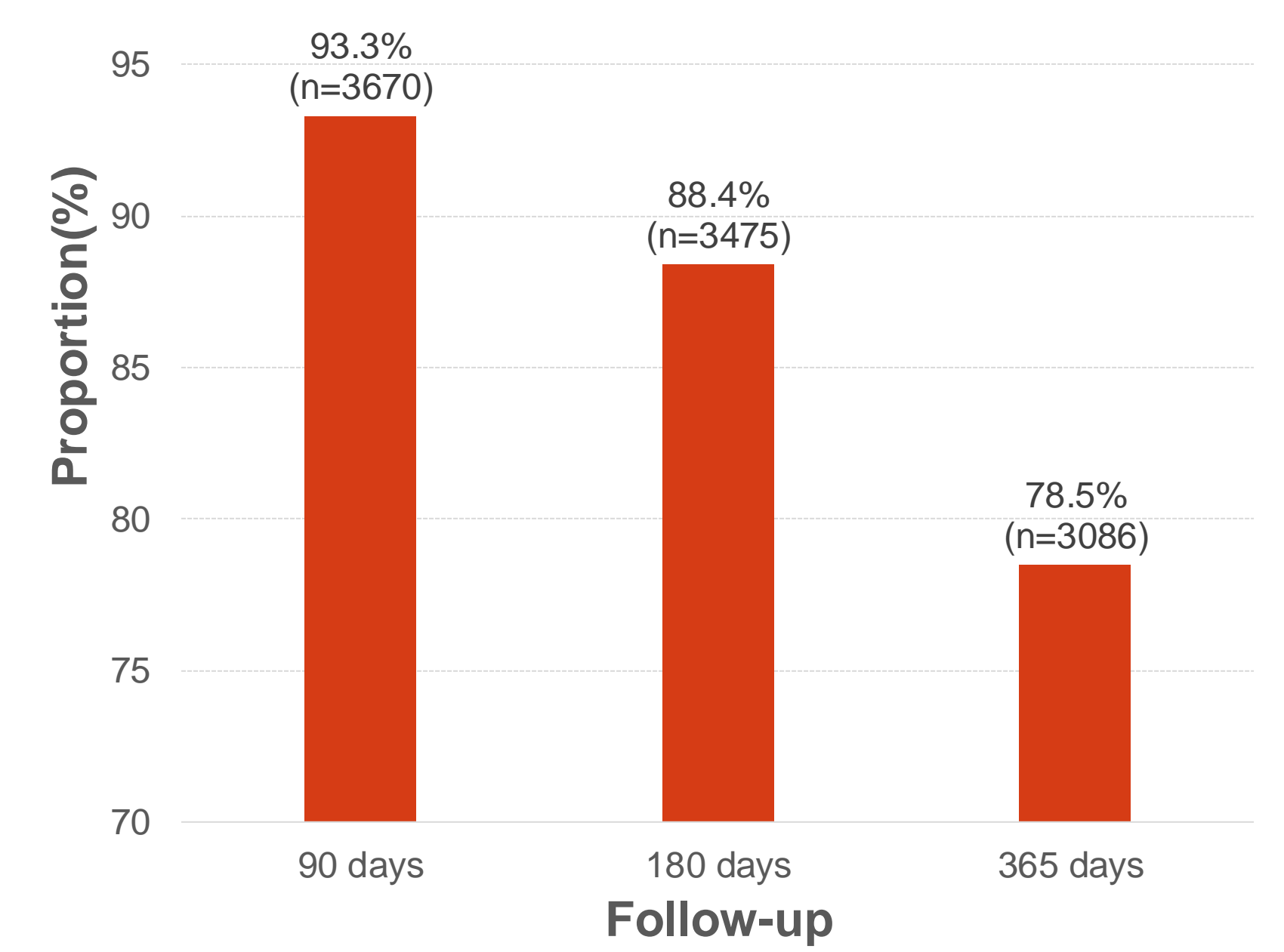
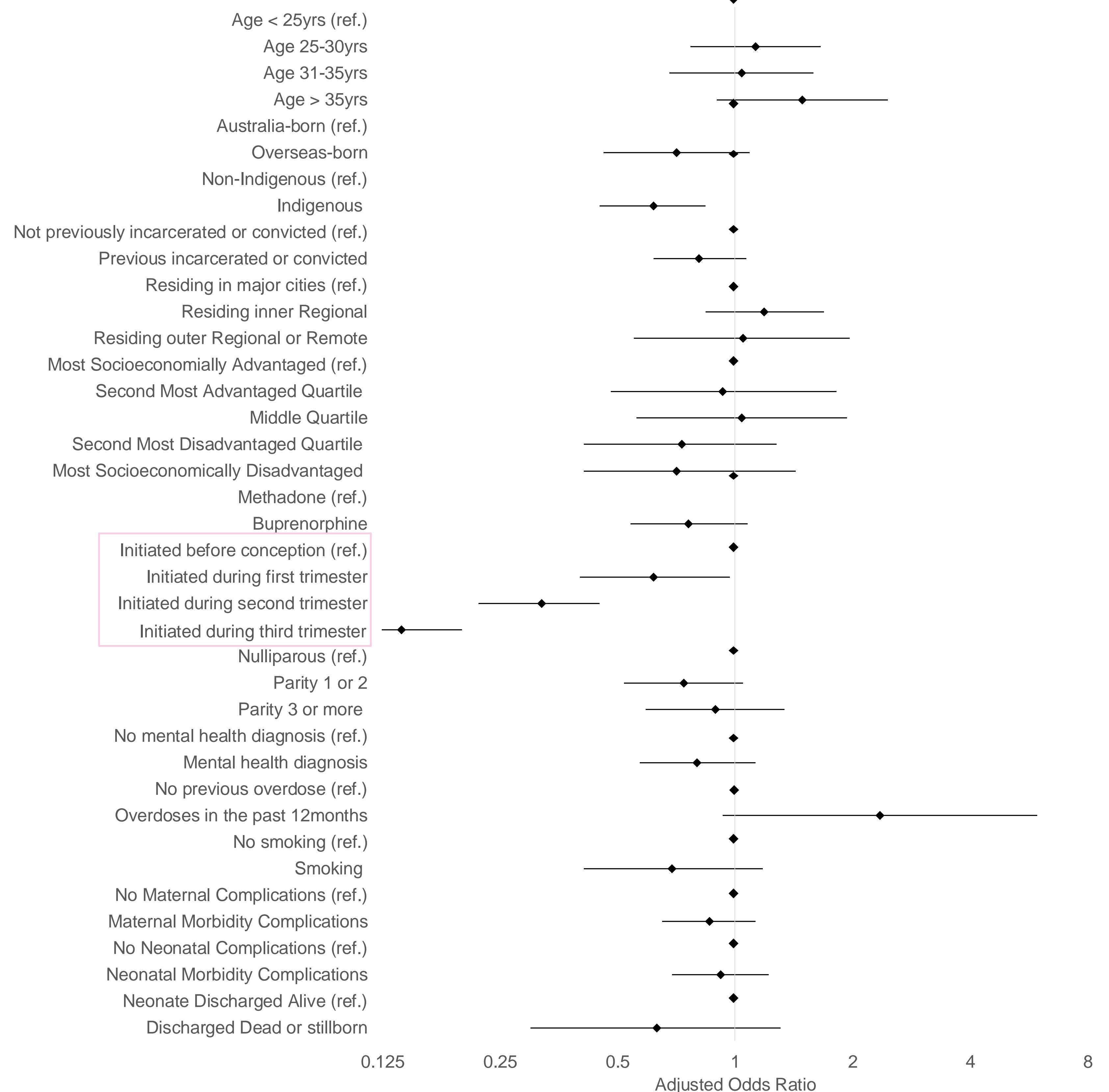


Figure 3: Adjusted Odds Ratio for retention at 90 days



Conclusion

- Retention rates in this cohort were relatively high
- Moderate variations existed amongst different sociodemographic, maternal health and birth outcome characteristics.
- Substantially **greater retention was associated with early OAT initiation**
- Targeted interventions should focus on enhancing OAT **access across all women of reproductive age** with OUD and improving **contraception awareness**

References

- Foo, L., Frei, M., & Lubman D. Managing opioid dependence in pregnancy. *Australian Journal for General Practitioners*. 42, 713-716 (2013).
- American College of Obstetricians and Gynecologists. Opioid use and opioid use disorder in pregnancy. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/08/opioid-use-and-opioid-use-disorder-in-pregnancy#> (2017).