# Improving Child Welfare, Newborn and Maternal Outcomes with the COMPASSION Model

## **INTRODUCTION**

- Opioid use during pregnancy has risen, with a 131% increase in opioid-related diagnoses at delivery from 2010 to 2017.
- Neonatal opioid withdrawal syndrome (NOWS) has also increased, with a 433% increase from 1.5 to 8.0 per 1,000 hospital births from 2004 to 2014.
- Pregnant, postpartum, and parenting individuals with substance use disorder (SUD) and their newborns have unique treatment needs that require a collaborative approach, integrated services, and early intervention to facilitate optimal family wellbeing.
- Community Of Maternal PArenting Support for Substance Impacted PeOple & Newborns (COMPASSION) is an innovative model that promotes trauma-informed, respectful care and zeroseparation for the family unit during a 5-day, extended stay on the postpartum unit.

### **METHODS**

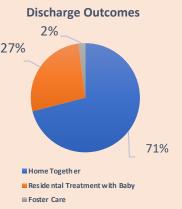
- Retrospective chart review
- Swedish Medical Center, Seattle, WA
- 44 birthing people/newborn/family units who presented in labor >35 weeks gestation in 2022 and who chose to engage in the **COMPASSION** stay
- Primary Outcomes:
  - Completion of COMPASSION
  - Child welfare
    - Plan of safety care (POSC), child protective services (CPS) referral, family team decision making (FTDM) meeting, foster placement
- Secondary Outcomes:
  - Medication for OUD (MOUD) treatment choice and dose
  - Breastfeeding rates
- Average length of stay (ALOS)
- NOWS
  - Morphine requirement, NICU admission

### RESULTS

	Birthing parents on Methadone BID, n=24	Birthing parents on Buprenorphine, n=20
MOUD Dose	30mg BID – 150mg BID (mean 95mg BID)	4mg BID – 8mg QID (mean 20mg daily)
Mode of delivery GA	15 SVE (63%), 9 CS (37%) Mean GA 38w0d	10 SVE (50%), 10 CS (50%) Mean GA 38w5d
Breastfeeding	21 (88%)	15 (75%)
NOWS	21 (88%) no NOWS 2 (8%) morphine x1 1 (4%) NICU/NOWS	15 (75%) no NOWS 3 (15%) morphine x1 2 (10%) NICU/NOWS
ALOS – birthing parent	5 days, 100% MOUD, warm- hand-off, OD, f/u	5 days, 100% MOUD, warm- hand-off, OD, f/u
ALOS – newborn	8.2 days: 19 (80%) 5 days 2 (16%) 18 days peds/feeding 1 (4%) 30 days NICU	8.2 days: 16 (80%) 5 days 2 (10%) 10 days placement 2 (10%) 32 days NICU
COMPASSION	23 (98%), 1 AMA (2%)	20 (100%)
Warm hand-off	24 (100%)	20 (100%)
Child Welfare Outcomes		

#### Child Welfare Outcomes

Methadone	Buprenorphine
Plan of Safety Care / no open CPS case: 12 (50%)	Plan of Safety Care / no open CPS case: 10 (50%)
CPS evaluation: 12 (50%)	CPS evaluation: 10 (50%)
Parent discharge with newborn: 23 (99%) • 17 (74%) home • 6 (25%) residential	Parent discharge with newborn: 20 (100%) • 14 (70%) home • 6 (30%) residential



### **CONCLUSION**

- The innovative COMPASSION model offers patient-centered and respectful care for the whole family unit while positively impacting child welfare, newborn and maternal outcomes.
- The COMPASSION model offers wrap-around, integrated services
  - Access: "no wrong door" service
  - Equity: embracing patients of all recovery phases, cultures/races, backgrounds
  - Recovery: strengthening the lifelong journey while fostering a safe, peaceful and compassionate environment for the birthing parent, newborn and greater family unit
- Further prospective research is needed to evaluate the effectiveness of postdelivery and transitional programs with the goal of facilitating early bonding, promoting positive maternal and neonatal outcomes, and eliminating CPS placement.

#### **AUTHORS & DISCLOSURES**

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#### REFERENCES

American College of Obstetricians and Gynecologists. (2017). Opioid use and opioid use disorder in pregnancy.

Hirai, A. H., Ko, J. Y., Owens, P. L., Stocks, C., & Patrick, S. W. (2021). Neonatal abstinence syndrome and materna opioid-related diagnoses in the US, 2010-2017. JAMA, 325(2), 146-155.

Patrick, S. W., Barfield, W. D., Poindexter, B. B., Cummings, J., Hand, I., Adams-Chapman, I., ... Walker-Harding, I (2020). Neonatal opioid withdrawal syndrome. Pediatrics, 146(5), e2020029074.

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We are grateful for the courage and resilience of our patients who navigate challenges and disparities to be healthy and to care for their children and loved ones.