# TITLE: Hepatitis C Virus Linkage to Care Cascade for Peripartum Individuals with Opioid Use Disorder

## INTRODUCTION

- 10-30% of pregnant individuals with opioid use disorder (OUD) have Hepatitis C virus (HCV).
- Perinatal transmission occurs in 5-8% of pregnancies (Chappell et al., 2021).
- 90% peripartum individuals with HCV remain untreated due to barriers in linkage to care (LTC) and postpartum follow-up (Schillie et al., 2020). Co-located HCV care in perinatal addiction clinic may help to address these barriers.

**The objectives of this study were to::**

(1) describe a LTC model for HCV screening and diagnosis in pregnancy and postpartum HCV treatment among individuals with OUD

(2) compare characteristics among individuals with HCV who did and did not receive postpartum direct-acting antiviral (DAA) treatment

## METHODS

- **Retrospective cohort study**
- **Population:** Individuals with pregnancy episodes 2016-2021 associated with co-located perinatal addiction clinic at a single academic medical center.
- **Statistical approach:** We compared characteristics HCV-positive individuals who did and did not receive DAA treatment using chi-squared and fisher's exact tests.
- **Linkage to care end-points:** proportion of individuals who: (1) were screened with HCV antibody or viral load, (2) diagnosed with HCV, (3) prescribed DAA treatment, (4) completed DAA treatment,), (5) tested for and (6) had a sustained viral response at 12 weeks (SVR12) after completing DAA treatment.

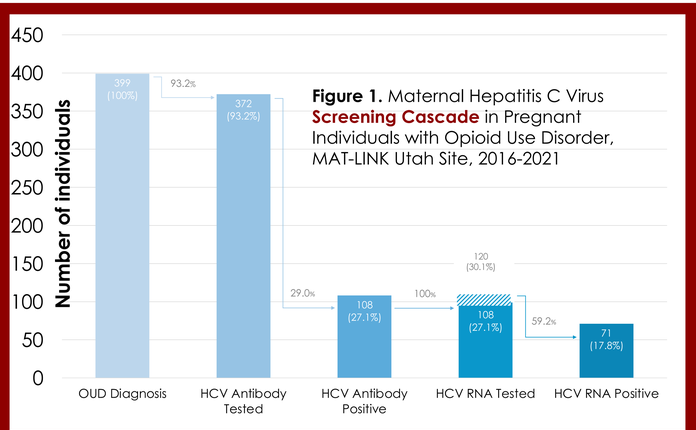


**Figure 1.** Maternal Hepatitis C Virus **Screening Cascade** in Pregnant Individuals with Opioid Use Disorder, MAT-LINK Utah Site, 2016-2021

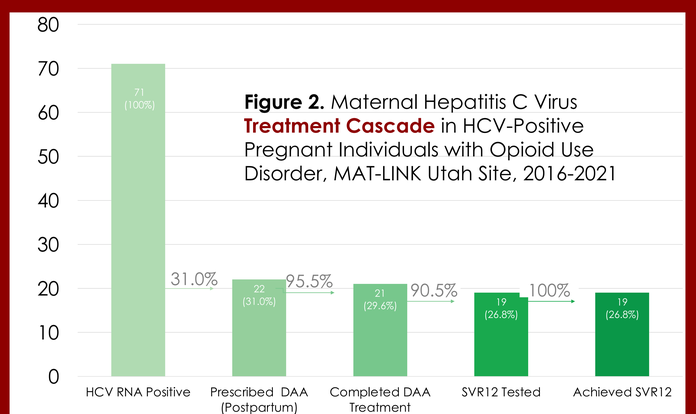


**Figure 2.** Maternal Hepatitis C Virus **Treatment Cascade** in HCV-Positive Pregnant Individuals with Opioid Use Disorder, MAT-LINK Utah Site, 2016-2021

Co-located perinatal addiction care model achieves high Hep C screening rates and HCV modest treatment rates.

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## RESULTS

- From 2016-2021, 399 pregnant individuals with OUD were identified:
  - Most individuals in the cohort were aged 25-34 (74.7%), White (84.6%), and publicly insured (83.7%), had depression (72.8%), anxiety (74.1%), or PTSD (47.2%).
  - Active substance use in the 6-week postpartum period: opioid (21.5%) and stimulant (15.4%)
  - Medication for opioid use disorder at time of delivery: none (33.4%), buprenorphine (61%) and methadone (4.6%)
- In this cohort, 71 (17.5%) were diagnosed with HCV infection (**Figure 1**).
- Of the 71 individuals with HCV, 22 (31.0%) were prescribed DAA and 19 (26.8%) achieved SVR12 status (**Figure 2**).
- Compared to HCV-positive individuals who did not receive DAA treatment, a higher proportion of those who received DAA treatment were taking buprenorphine at delivery (63.6% vs 45.8%; p<.05) and a lower proportion had active substance use within 6 weeks postpartum (18.2% vs 50.0%; p=.02).

## DISCUSSION

- Co-located OUD, HCV and obstetric care resulted in high rates of HCV screening and diagnosis during pregnancy, with promising LTC for postpartum DAA treatment.

## DISCLOSURE AND FUNDING


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