

## PEER-FACILITATED TELEMEDICINE HEPATITIS C TREATMENT FOR RURAL PEOPLE WHO USE DRUGS: RESULTS FROM A RANDOMIZED CONTROLLED TRIAL

### Authors:

Seaman A,<sup>1,4</sup> Leichtling G,<sup>2</sup> Herink M,<sup>3</sup> Spencer H,<sup>1</sup> Thomas A,<sup>5</sup> Leahy J,<sup>6</sup> Gailey T,<sup>1</sup> Cook R,<sup>1</sup> Myers R,<sup>1</sup> Korthuis PT<sup>1</sup>.

<sup>1</sup> Department of Medicine, Section of Addiction Medicine, Oregon Health & Science University, <sup>2</sup> Comagine Health, Portland, Oregon, USA; Portland, Oregon, USA; <sup>3</sup> College of Pharmacy, Oregon State University, Portland, Oregon USA; <sup>4</sup> Hepatitis C Elimination Program, Central City Concern, Portland, Oregon, USA; <sup>5</sup> Oregon Health Authority, Public Health Division, Portland, Oregon, USA; <sup>6</sup> Oregon Health Authority, Health Systems Division, Portland, Oregon, USA

**Background:** Hepatitis C (HCV) elimination requires treating people who use drugs (PWUD). Yet fewer than 10% of PWUD in the United States access HCV treatment due to limitations in healthcare system treatment capacity, particularly in rural communities. We designed a randomized controlled trial to assess whether peer-facilitated telemedicine in rural Oregon could increase HCV cure rates over facilitated referrals to local clinics.

**Methods:** Between July 17, 2020 and December 12, 2022, PWUD in 5 rural Oregon counties who had positive HCV RNA, past 90-day injection drug or recreational non-injection opioid use, and health insurance were randomized to peer-facilitated telemedicine HCV treatment (TeleHepC) versus peer-facilitated referral to local providers (enhanced usual care [EUC]). Those with decompensated cirrhosis or pregnancy/breastfeeding were excluded. TeleHepC clinicians developed standing orders for peer-facilitated pretreatment evaluation and medication protocols. Peers supported screening, telemedicine visits, medication delivery, and adherence. Chi-square tests compared group differences in sustained virologic response at 12 weeks (SVR12; primary outcome) and HCV treatment initiation at 6 months (secondary outcome).

**Results:** Of 775 individuals were screened, 226 were eligible, and 203 randomized (100 TeleHepC, 103 EUC). Of those randomized, the majority were male (62.1%) and White (88.2%), with past 30-day use of methamphetamine (88.2%) and fentanyl/heroin (57.6%). Of participants assigned to peer-facilitated TeleHepC, 85 out of 100 participants (85.0%) initiated treatment versus 13 of 103 participants (12.6%) assigned to EUC ( $p<0.001$ ). As of March 2023, 59 of 89 (66.3%) in the TeleHepC and 11 of 89 (12.4%) in the EUC groups achieved SVR12 ( $p<0.001$ ), with data lock anticipated July 2023.

**Conclusion:** Peer-assisted TeleHCV substantially increased HCV treatment initiation and cure compared to EUC. This model could be replicated in rural and lower resource settings, furthering World Health Organization 2030 HCV elimination goals by expanding HCV treatment access directly to PWUD via trusted peers and telemedicine.

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