

Telemedicine for HCV Care in Substance Users

Andrew Talal, MD, MPH

Professor of Medicine

Director, UBMD Center for Clinical Care and Research

in Liver Disease

University at Buffalo, SUNY

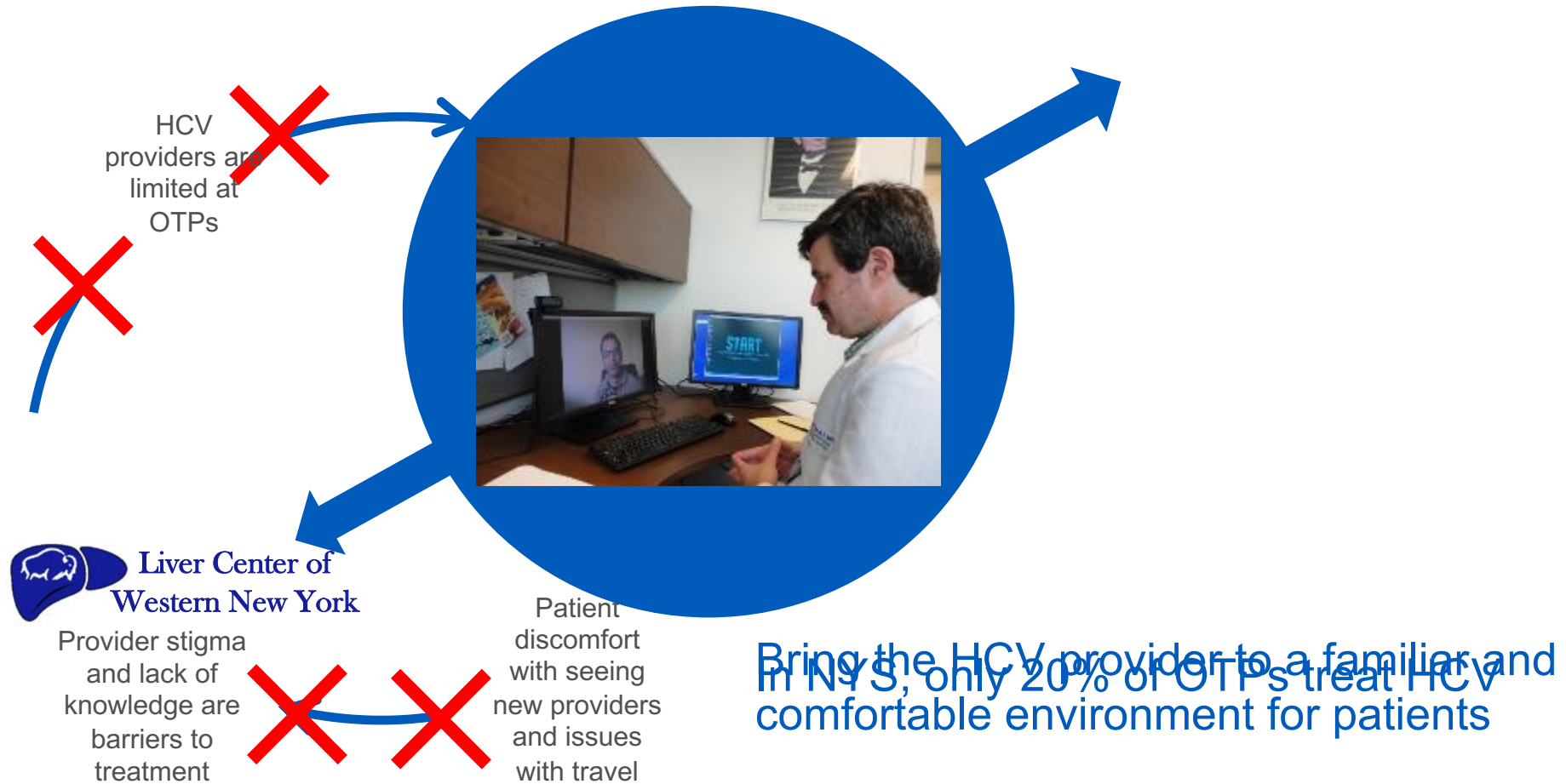
Specific Challenges Faced by PWUDs

- Stigmatization regarding diagnosis of HCV
- Poor knowledge and inaccurate perceptions about HCV infection, the long-term consequences and associated treatment
- Perceived low need for treatment
 - Absence of noticeable symptoms
 - Belief that HCV is a “benign disease”
- In many states, restrictions on HCV medication provisions still exist
- Variations in reimbursement for HCV therapy create challenges in expanding pool of treating providers

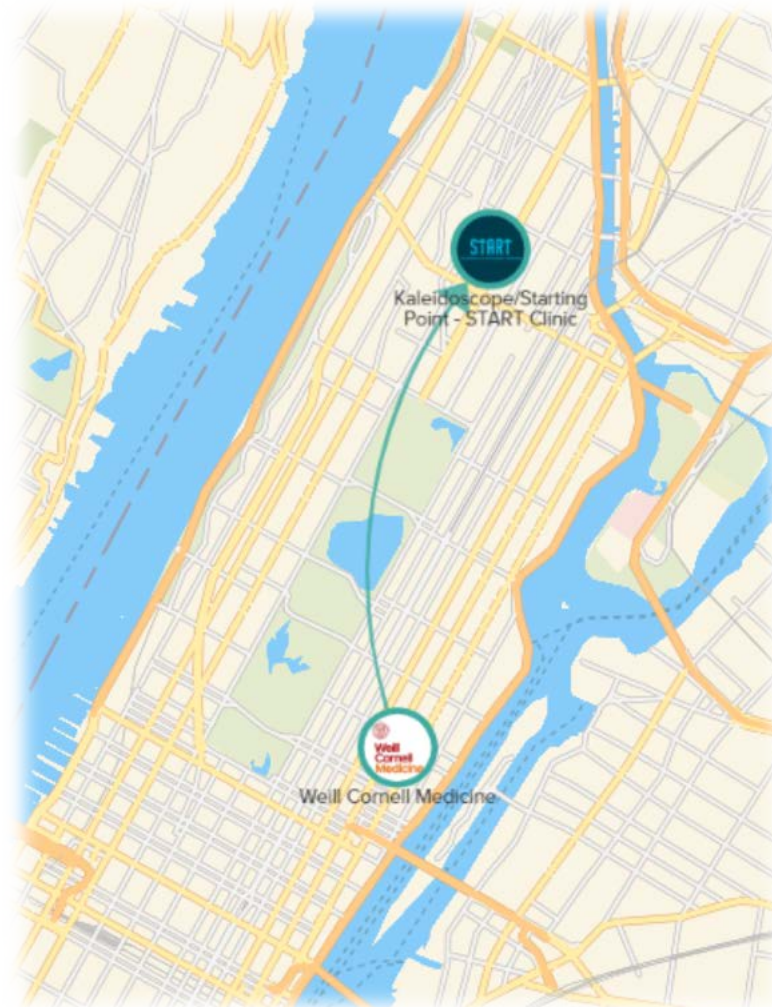
1. Barua S, et al. *Ann Intern Med.* 2015;163(3): 215-223. doi:10.7326/M15-0406;

2. Canary LA, et al. *Ann Intern Med.* 2015;163(3): 226-228. doi:10.7326/M15-0320; 3. Grebely J, et al. *Nat Rev Gastro Hep.* 2017;14:641-651.

Off-Site Referral Model



CDC Foundation HCV Telemedicine Project

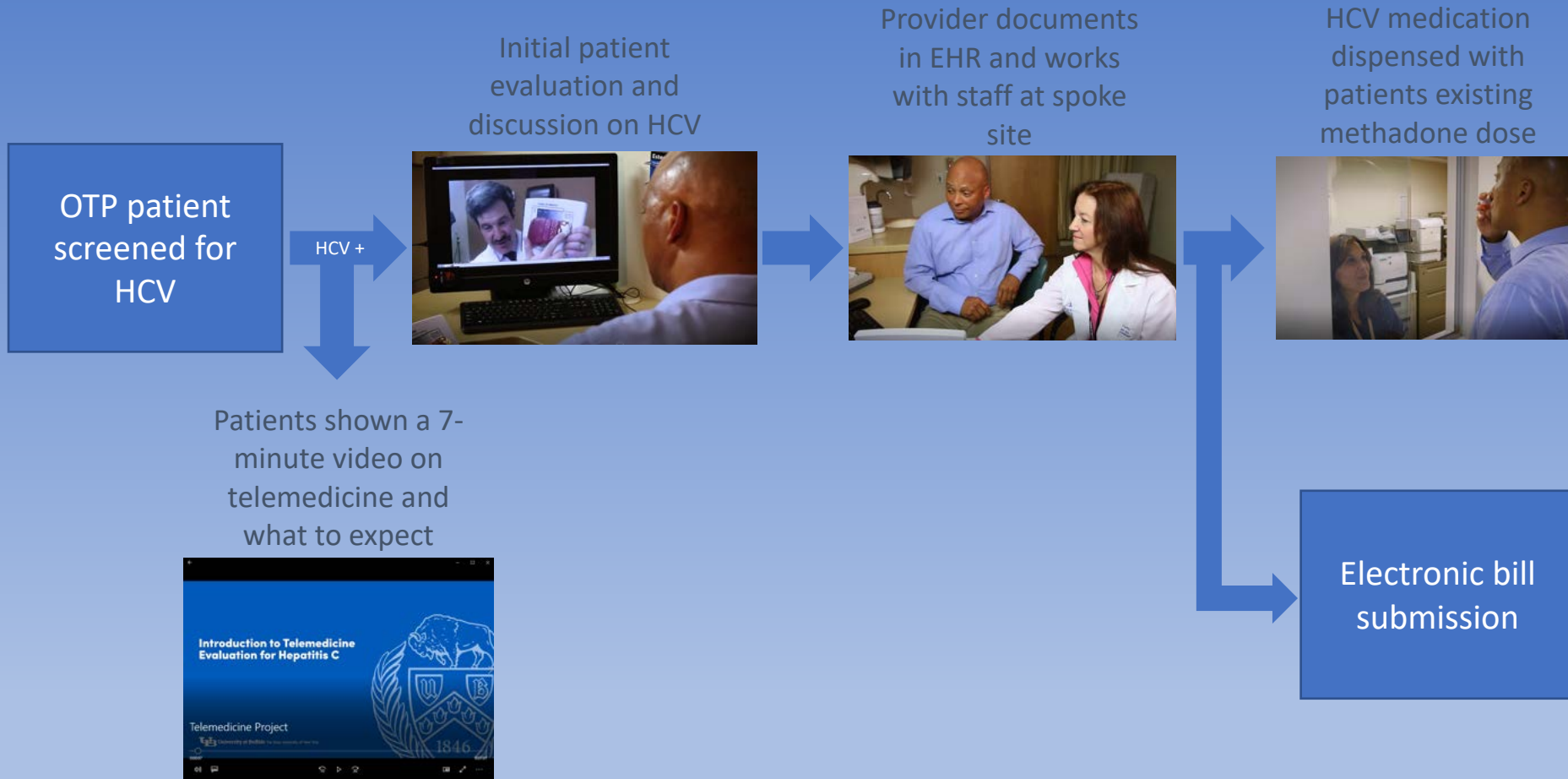


Achieved 93%
SVR rate ^[1]

[1] Talal AH, McLeod A, Andrews P, et al. Patient Reaction to Telemedicine for Clinical Management of Hepatitis C Virus Integrated into an Opioid Treatment Program. *Telem J E Health*. 2019;25(9):791–801. doi:10.1089/tmj.2018.0161



The Model



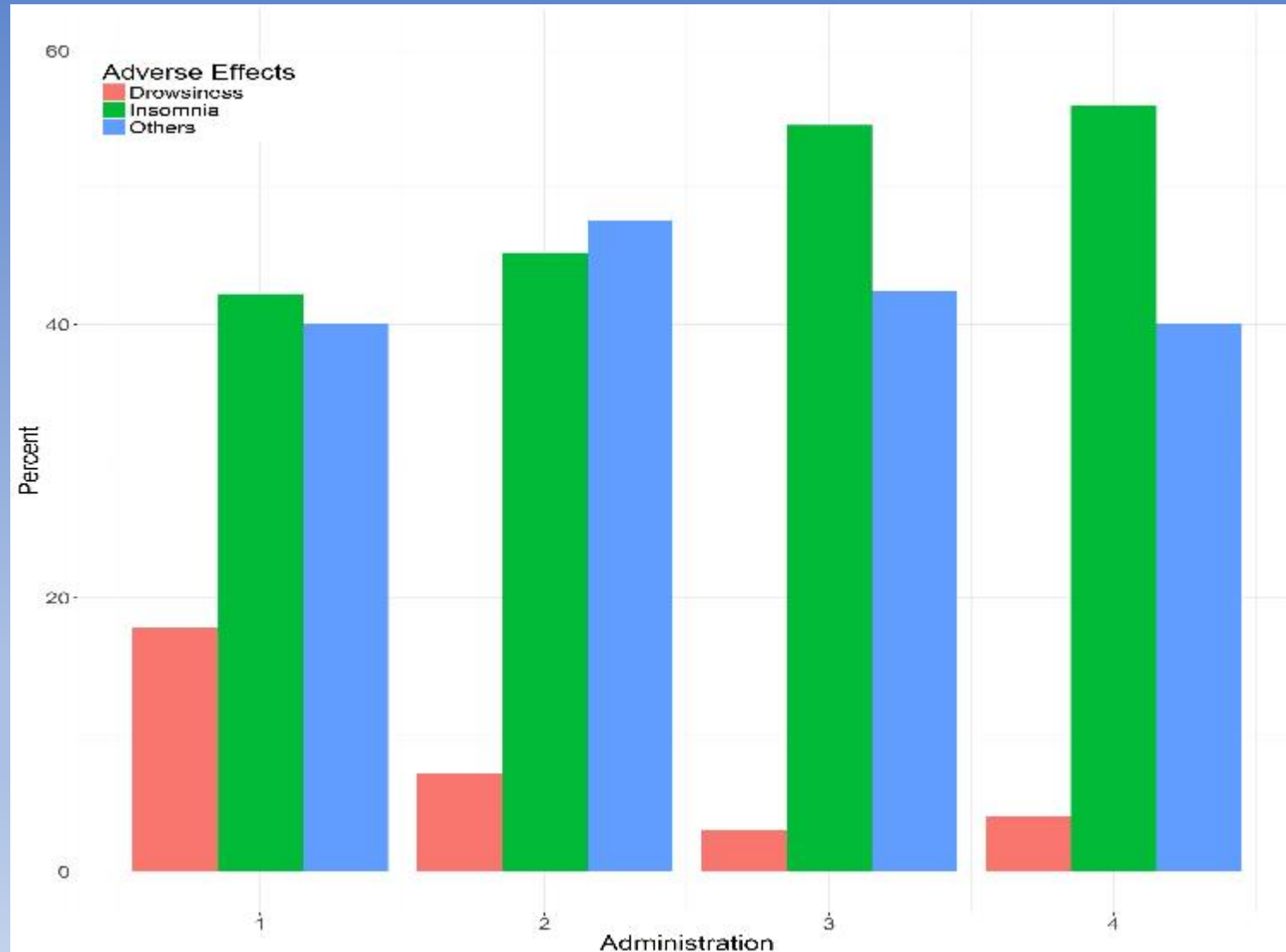
Procedures

- All pre-treatment labs (HCV RNA, HCV genotype, Fibrosure [Labcorp]) is performed onsite
- Patients treated for 8 or 12 weeks with 12 week post-treatment follow up to determine SVR status.
- Telemedicine-based visits occur biweekly during HCV therapy
- Social variables obtained from electronic health record.
- Telemedicine Satisfaction Questionnaire (TSQ) administered at first telemedicine evaluation, at initiation of therapy, and at completion of follow up
- Adherence survey is administered biweekly while under HCV therapy

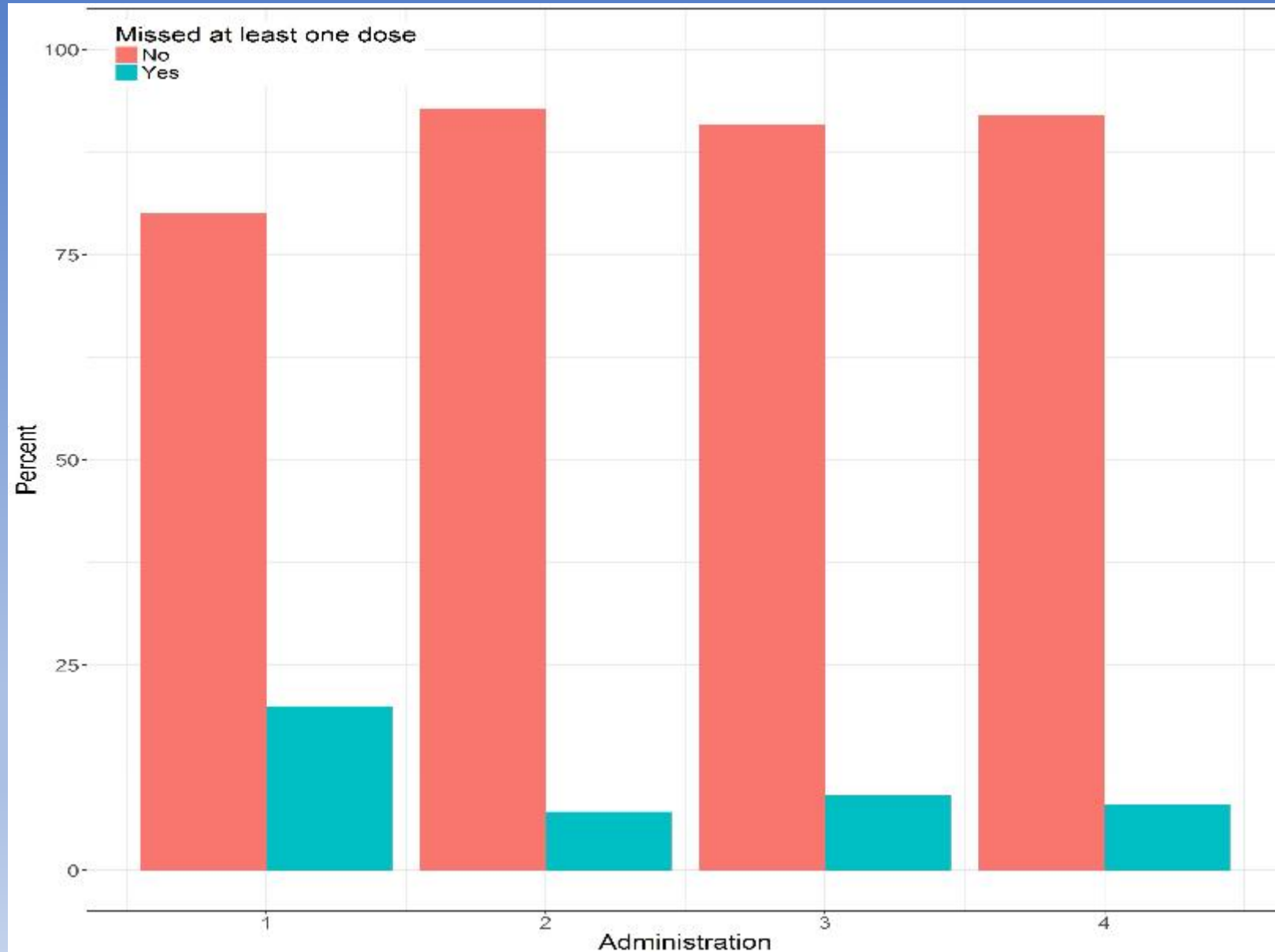
Virologic Results

- A total of 62 patients were evaluated and 45 received DAA-based therapy
- 42 (93%) patients achieved SVR
- 1 patient had GI discomfort at week 4 and discontinued treatment prematurely with HCV RNA relapse
- 2 patient likely had reinfection with negative week 4 and positive week 12 HCV RNA values

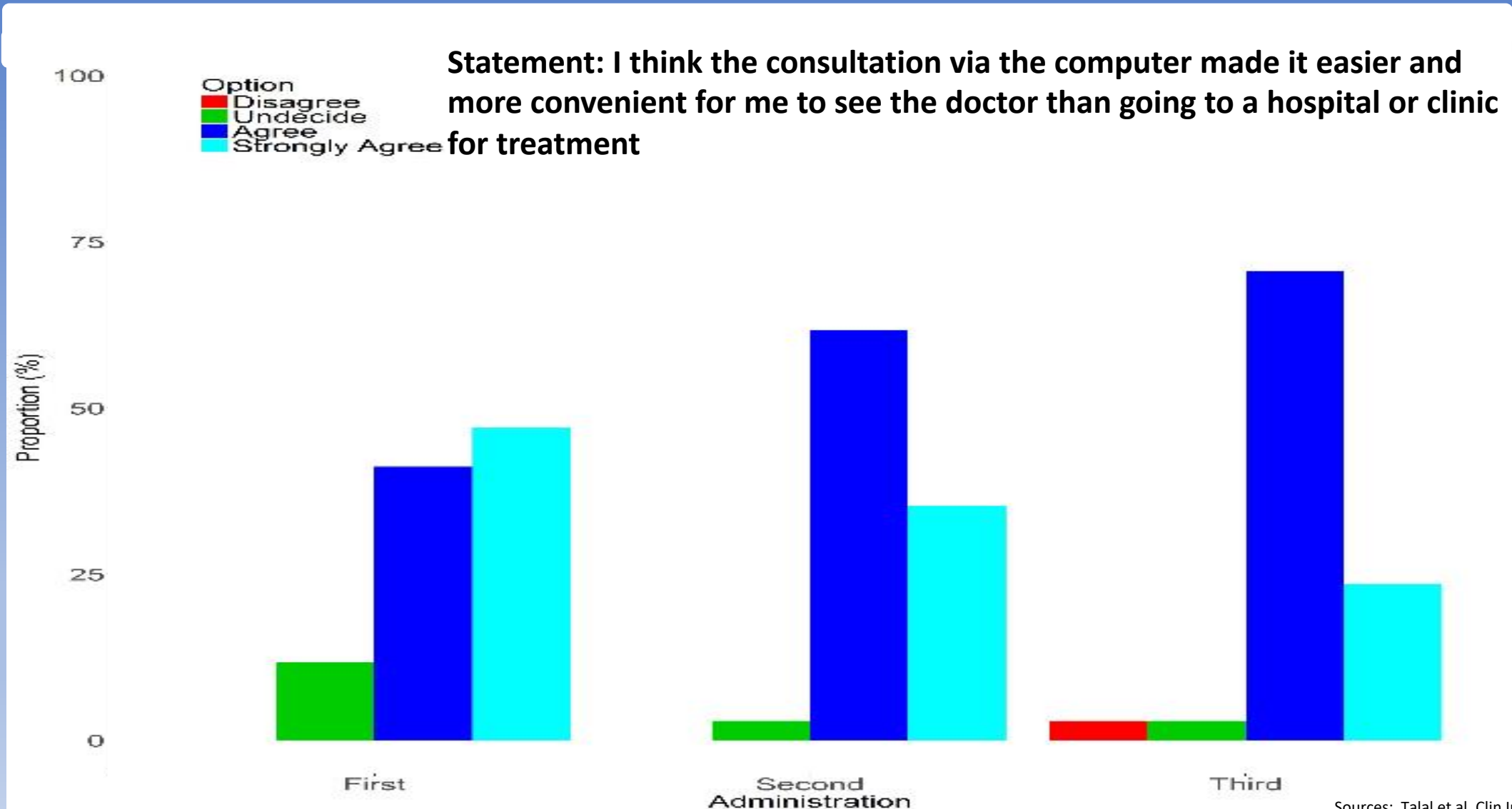
Adverse Effects



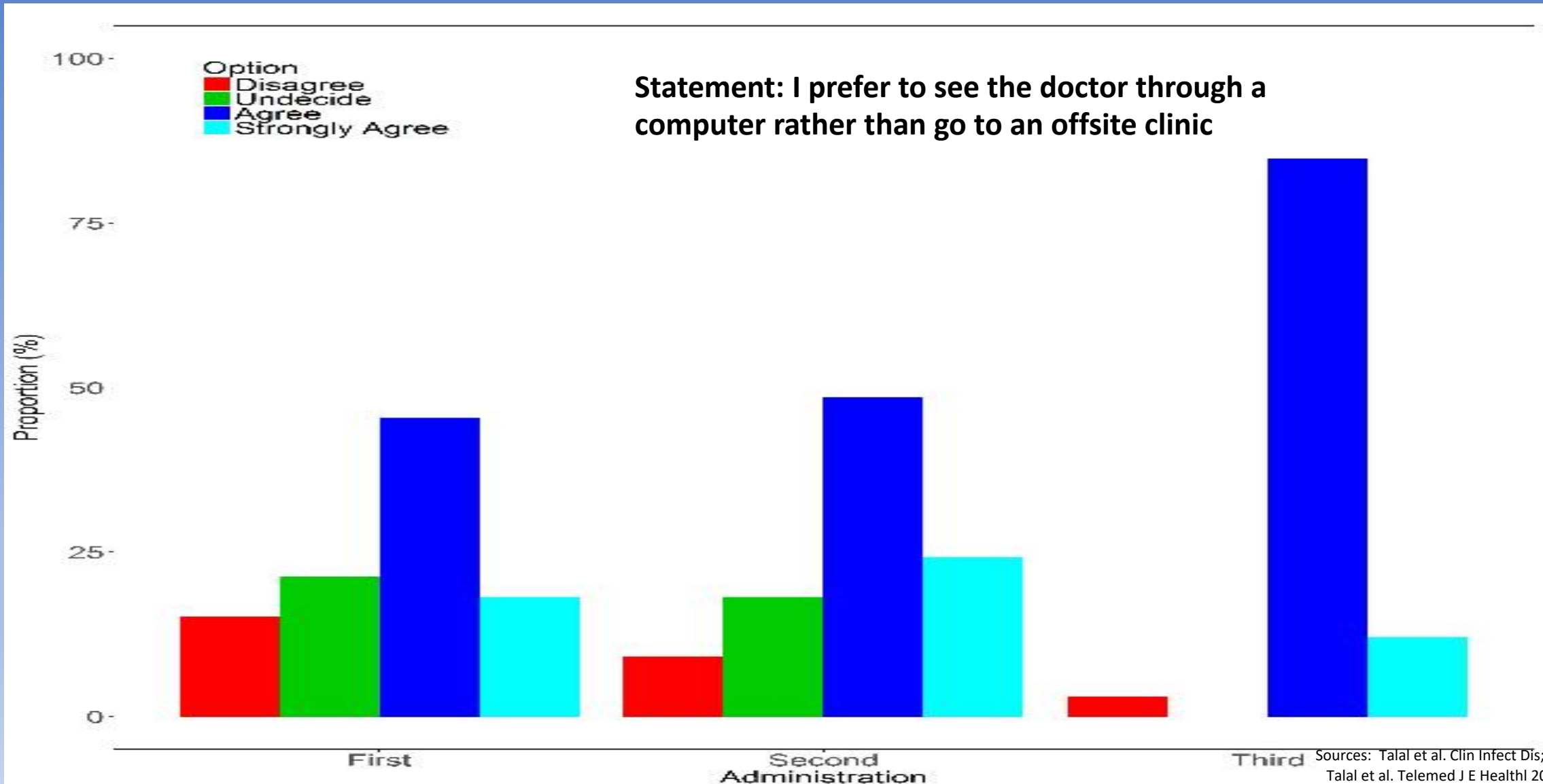
DAA Adherence



Convenience for Integrated HCV Care via Telemedicine



Preference for Integrated HCV Care via Telemedicine

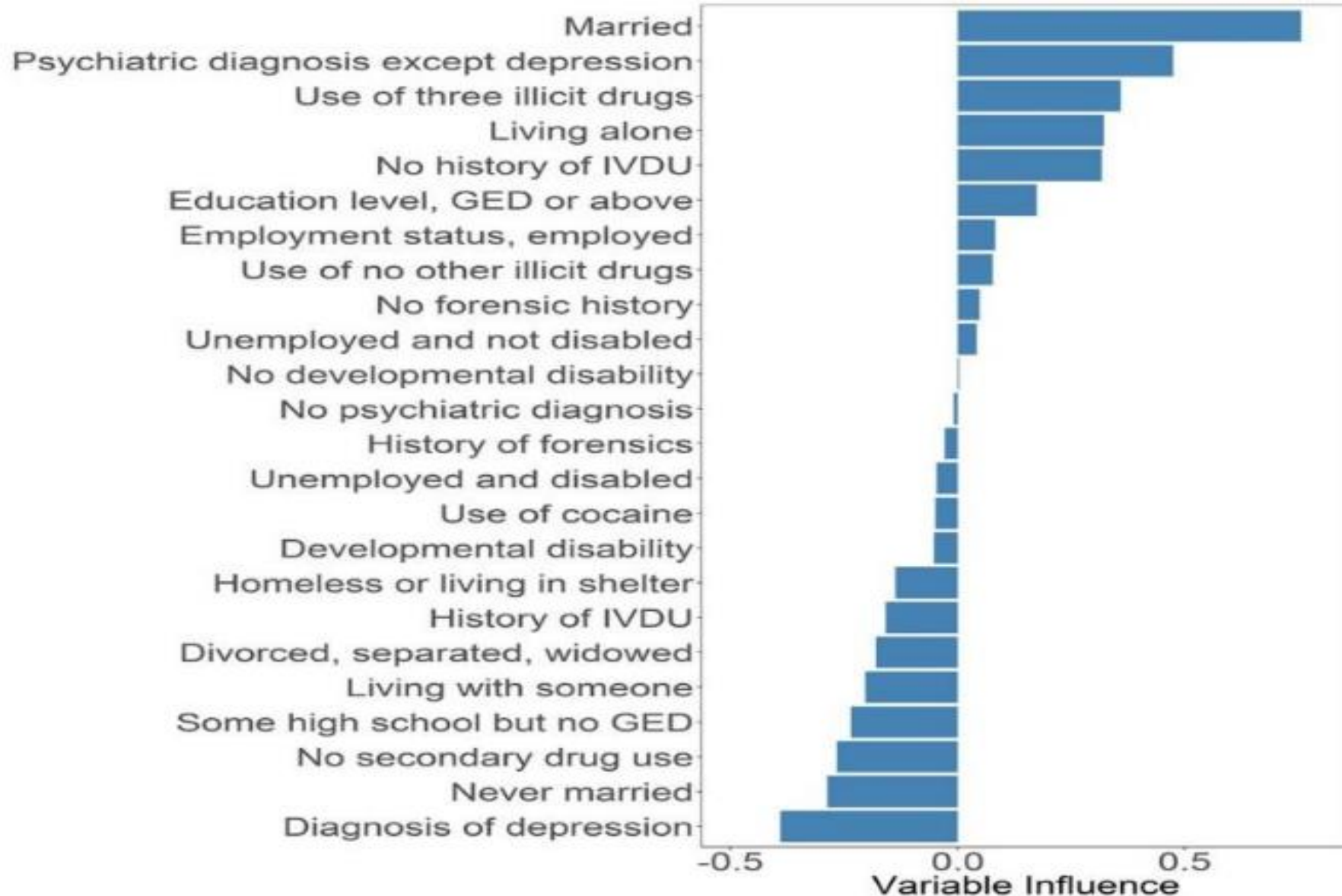


Social Determinants of Health

- Social, behavioral, and environmental factors that contribute to health inequalities and health outcomes.



Social Variables

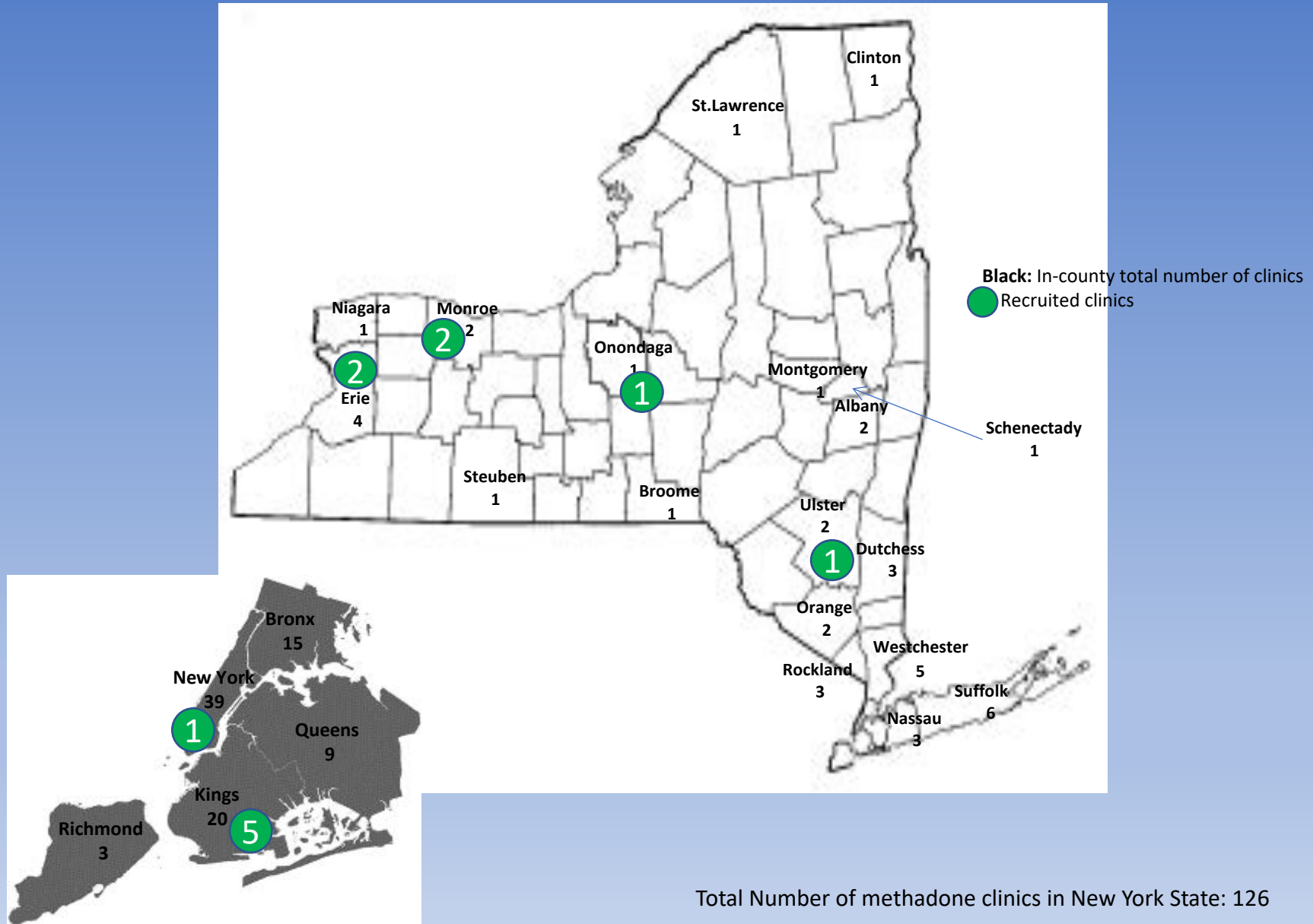


- Any category with a **positive** value could **increase** the probability of receiving treatment.
- Any category with a **negative** value could **decrease** the probability of receiving treatment.

TEAM-C: **T**elemedicine **E**valuation, **A**dherence and **M**edication for **H**epatitis **C**

- Compare effectiveness of telemedicine to usual care among patients on opiate substitution therapy (OST)
 - Patient-Centered Outcomes Research Institute (PCORI) supported 5-year project.
- Secondary aims
 - Compare treatment initiation and completion rates.
 - Assessment of:
 - Satisfaction with health care delivery
 - Satisfaction with telemedicine
 - Sociodemographics

PCORI OTP Sites



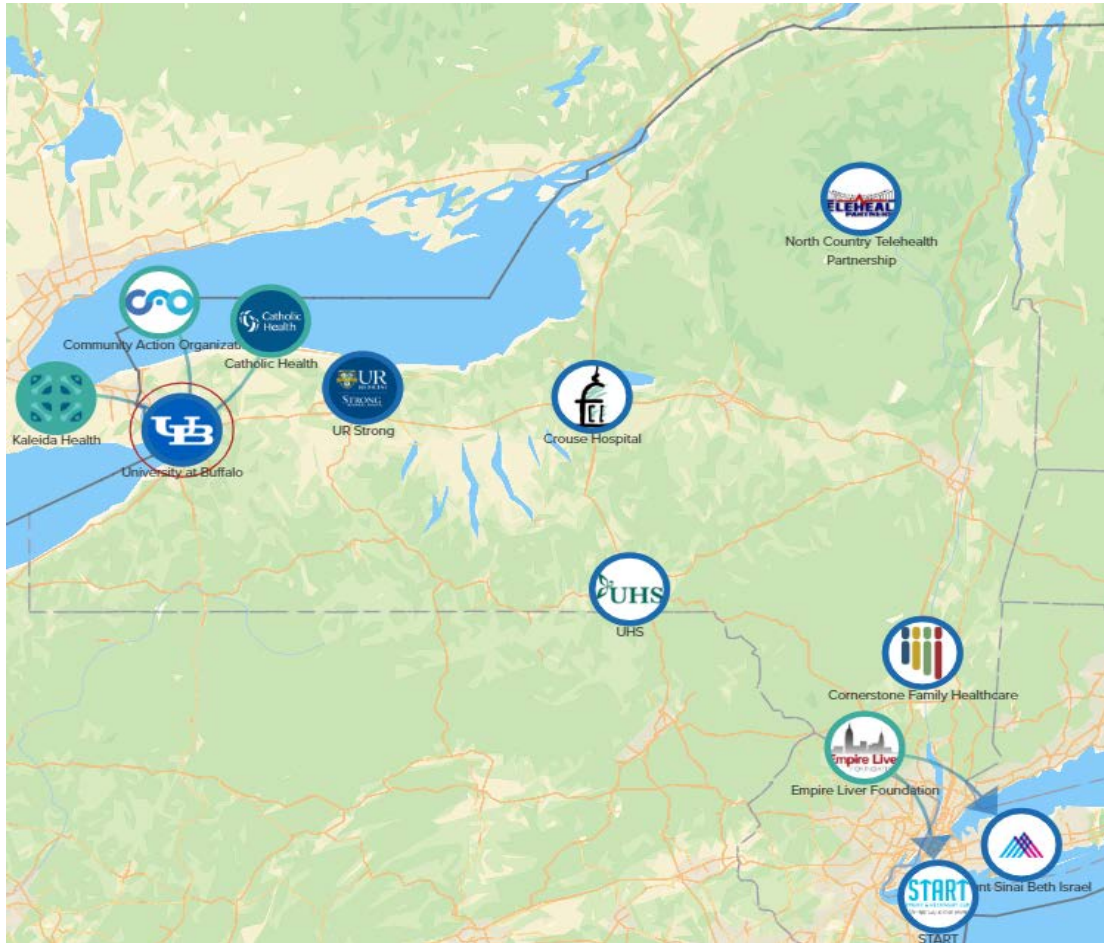
Why Is the OTP Ideal for Integrated Care?

- OTP patients have 10X higher rates of psychiatric disorders
 - Prevalence of depression and anxiety disorders is > 70%
- Engagement – Trusting relationship already exists with the counselors and other staff
- Most patients are seen frequently – allows for encouragement, close supervision, monitoring
- Patients experience less stigma
- Joint treatment planning
- Convenient, access to care is improved

Telemedicine Summary

- Opioid epidemic continues to increase HCV prevalence and incidence
 - Changing demographics
- HCV care via telemedicine is a feasible, reimbursable model for substance users
 - Excellent patient acceptance that improved over time
 - Excellent treatment efficacy
- Telemedicine is acceptable to substance users
 - Prefer “one stop” shopping and convenience of co-located medical care
 - Privacy is not issue.
- Social determinants of health and drug use characteristics
 - Affect linkage to HCV care and completion
 - HCV elimination strategies need to consider these factors

Statewide HCV Telemedicine Network



- Formation of **Empire Liver Foundation Telehealth Workgroup**
 - Expand telehealth for liver care
 - Improve telemedicine reimbursements
 - Address HCV medication procurement
 - Address inequalities in the distribution of resources required for HCV elimination

Conclusions

“One thing about addicts is that when a good thing is out, we pass the word. And that’s what we did.”

~ Tony, patient statement on HCV telemedicine project

- Telemedicine for HCV micro-elimination from OTPs in NYS is already occurring at 12 of 130 OTPs in NYS
- Pre-requisites for HCV elimination already present in OTPs
 - Integration of medical and substance use services
 - **Integrated DAA and methadone dispensing increases adherence**
 - Facilitates engagement of high-risk, difficult to engage population
 - OTPs described as **self-identified community that promotes advantageous programs**
- Aligns **with NYS HCV elimination plan**