

# Telemedicine-based Hepatitis C Virus Management for **Individuals on Opioid Agonist Treatment**

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#### **BACKGROUND**

- Despite high HCV prevalence, persons on opiate agonist therapy (OAT) rarely engage in HCV care when referred to offsite locations.
- Integrated, co-located care of substance use disorders and co-occurring conditions (i.e. hepatitis C and HIV) is widely advocated but has been difficult to implement.
- Telemedicine (two-way videoconferencing) between a patient and specialist, each geographically separated, permits virtual integration of substance use treatment with that for co-occurring conditions.

## **OBJECTIVES**

- To evaluate efficacy of telemedicine-based HCV treatment among patients on OAT.
- To evaluate OAT patient satisfaction with telemedicine using the Telemedicine Satisfaction Questionnaire (TSQ) and treatment adherence.

#### **MATERIALS & METHODS**



- · All pre-treatment labs (HCV RNA, HCV genotype, Fibrosure (Labcorpl) performed onsite.
- · Patients are treated for 8 or 12 weeks with 12 week post-treatment follow up to determine viral eradication status. Telemedicine-based visits occur biweekly during HCV therapy.
- · TSQ administered at first telemedicine evaluation, at initiation of therapy, and at completion of follow up. Adherence is assessed biweekly while under HCV therapy.

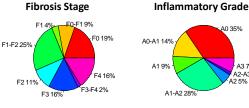
• A total of 61 patients have been evaluated and 38 (62.30%) have completed DAA-based therapy (18/38 received 8 weeks of

• All patients are HCV undetectable at weeks 4 or 12 posttreatment except one patient who discontinued at week 4.

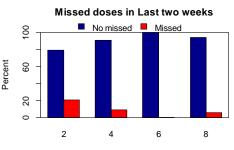
Variable	Total	Level	Count	Percent
Gender	61	M	37	60.66
		F	24	39.34
Race	61	AA	39	63.93
		Black	5	8.20
		Neither	8	13.11
		White	9	14.75
Ethnicity	60	Hispanic	18	30.00
		Non Hispanic	42	70.00
HIV	61	No	41	67.21
		Yes	15	24.59
		Unknown	5	8.20
HCV genotype	57	1a	38	66.67
		1b	16	28.07
		2b	1	1.75
		3	2	3.51
		Mean	SD	Median
Age	61	57.55	9.98	58.9
HCV RNA	60	6.36	0.57	6.33

Abbreviations: OAT-opiate agonist therapy; TSQ-Telemedicine Satisfaction Questionnaire; DAA-direct acting antiviral; EHRelectronic health record; SVR sustained virological response; SDstandard deviation.

## **RESULTS**



## **Adherence and Side Effects**



### Treatment Week

- Treatment-related side effects include gastrointestinal (nausea, vomiting, diarrhea, constipation, bloating), headache, and dizziness.
- · Insomnia reported by 45% to 65% of subjects, although high baseline level in substance using population.

## **CONCLUSIONS**

- Telemedicine-based HCV care is a feasible, reimbursable model for HCV treatment delivery in an OAT program.
- · Excellent patient acceptance that improved over time.
- Excellent adherence and treatment efficacy.

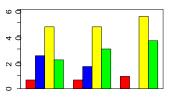
## **Telemedicine Satisfaction**

- · No technical difficulties with telemedicine delivery.
- time, subjects became more comfortable with telemedicine-based HCV treatment delivery and increasingly prefer compared to off-site referral.

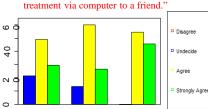
A3 7%

A2-A3 2%

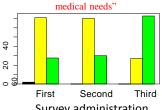
"I prefer to see the doctor through a computer rather than to go to an off-site clinic."



"I would recommend medical



"The computer consultation met my



Survey administration

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