

# IMPROVED ACCESS TO HCV TREATMENT FOR SUBSTANCE USERS: THE IMPACT OF ONSITE TRANSIENT ELASTOGRAPHY USE IN AN INNER CITY COMMUNITY HEALTH CENTRE

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## Background

While HCV rates may be decreasing amongst the general population<sup>1</sup>, certain groups experiencing severe economic hardships, problematic substance use and social exclusion experience increasing incidence and prevalence of HCV and persistent barriers to care<sup>2</sup>. The introduction of DAA (Direct Acting Agent) therapies provides excellent opportunities to treat these complex patients. They are simpler regimes, more tolerable for patients and completed in a shorter time frame. In British Columbia publically funded HCV medication coverage must be pre-approved for each patient based upon **specified criteria**: at least **F2 fibrosis**, as determined by **transient elastography (TE)**, APRI score, FIB-4 (fibrosis 4), or liver biopsy.

## Implementing an Equity-based Framework

Using the concept of the **leaky cascade**, in 2012, practitioners at Cool Aid's Community Health Centre examined limitations in ability for patients to receive HCV treatment. Our goals were to **increase screening / monitoring, increase treatment numbers, and maintain / improve success rates**. Restricted access to transient elastography (available only in specialist centres) was identified as a significant barrier as **28% of patients did not attend their referral appointments**. Transient elastography (TE) is an essential part of accessing HCV treatment therapies as well as monitoring liver disease progression. In **June 2015**, Cool Aid CHC secured an onsite, portable TE machine and 12 clinical staff members (both doctors and nurses) to date have been trained to scan and interpret results during a primary health care visit.

## Reduced Time to Treatment

	Time to TE Assessment*	Time to TE Interpretation and Consultation	Time to Treatment Start
<b>Offsite TE</b> (n=42)	49 days High: 132 Low: 3	57 days High: 151 Low: 6	<b>257 days</b> (n=12) High: 700 Low: 49
<b>Onsite TE</b> (n=102)	Assessment and interpretation integrated into primary care visit.		<b>56 days</b> High: 199 Low: 5

\*mean times

**Treatment Eligibility leads to Sustained Virologic Response:**

Treatment Eligible and Approved	Treatment Started	Lost to Follow Up
102 (35% of scanned)	91 (89% of Tx eligible)	1 (1% of Tx starts)

**95% SVR** in those who have **completed treatment**



## Case Example

New to town, 50 year old Pat came to **Cool Aid's HCV support group**. At her first visit she was seen by the nurse and bloodwork was drawn, confirming hepatitis C genotype 1a infection. The **same day** she received those results, she was **offered TE** which showed F-3 fibrosis. She immediately met with the GP and was reviewed for suitability for treatment. As Pat was on Income Assistance Disability for her mental health challenges, funding for treatment was covered by BC Pharmacare. **Five weeks after her first visit**, Pat was **started on HCV treatment** and stayed engaged with the health centre with **weekly visits** during her treatment.

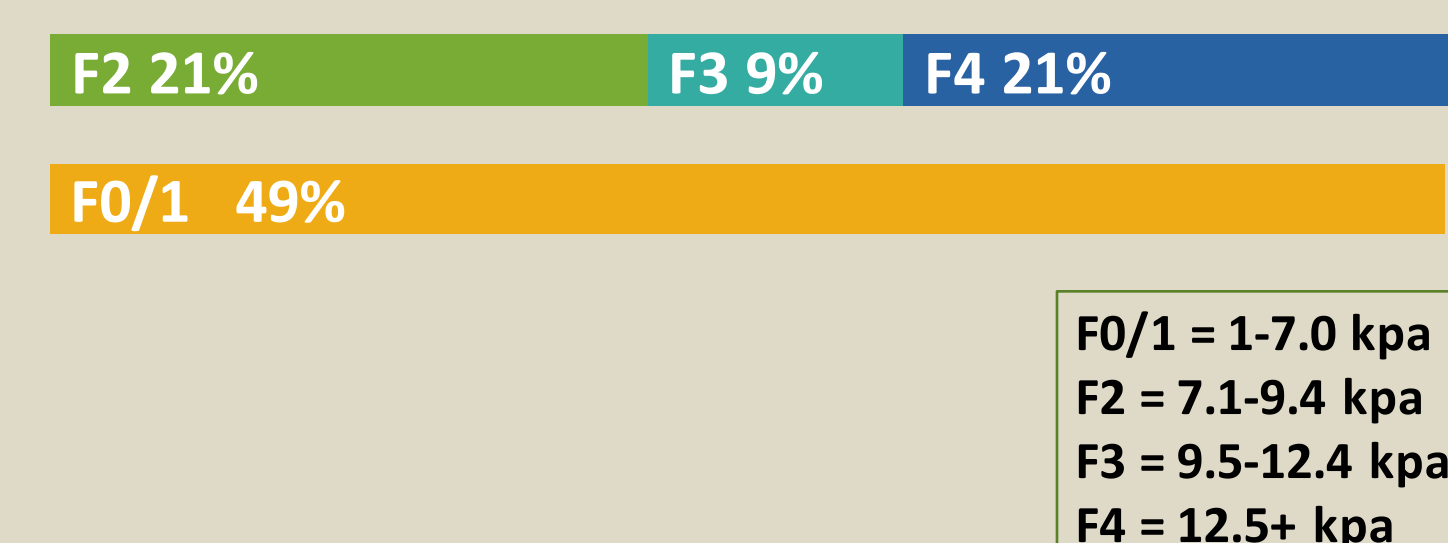
## Conclusion

Our research demonstrates that **lowering barriers to diagnostic tools** leads to **increased engagement and treatment** over a traditional external referral model. Inner city community health centres are **ideal places** to host relevant diagnostics such as TE as practitioners are better equipped to **evaluate treatment readiness**, to **support medication adherence** and **prevent reinfection** in this complex population.

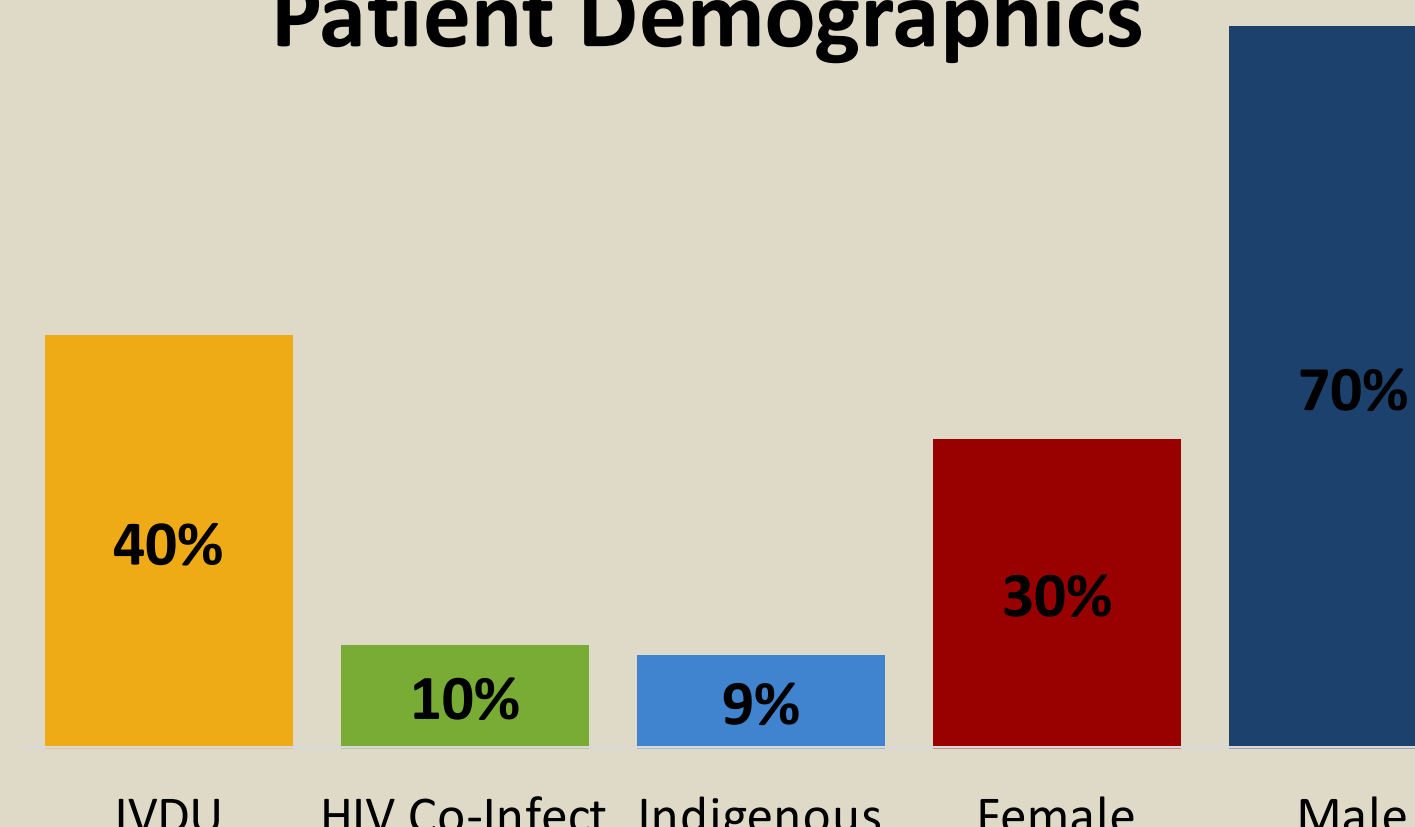
## Of the 288 Onsite Scans Performed in 12 Months

The **mean age** of patients receiving onsite TE is **51yrs** (max 68/min 21). Many indicators including the **severity of fibrosis** (51%=F2+) at a low age demonstrate the strikingly **high burden of illness** in this vulnerable population and is consistent with low life expectancy and complex health trajectories<sup>3</sup>.

### Severity of Fibrosis



### Patient Demographics



### Onsite TE Patient Genotypes

G1	G2	G3	Un-typed	Mixed
60%	6%	26%	8%	1%

## Improved Patient Engagement

Onsite TE supports increased engagement in HCV care. Patients were **2.96X** more likely to come for follow up visits after scans. Patients who were treatment eligible using local restrictive public reimbursement criteria were **5.20X** more likely to engage in follow up visits.

<sup>1</sup>Myers, Krajden, & Bilideau, 2014, <sup>2</sup>Grebely, Bruggman, Backmund, & Dore, 2013; Grebely & Dore, 2014; Klein et al., 2013, <sup>3</sup>Deans, Raffa, Lai, Fischer, Krajden, Amin & Tyndall, 2013.

## Cool Aid Community Health Centre

The Health Centre (CHC) provides a **“one-stop shop”** – low-threshold access to inter-disciplinary primary health care services geared towards economically vulnerable clients with complex medical needs and multiple barriers to accessing care. The multidisciplinary health team includes physicians, nurse clinicians, nurse practitioners, counsellors, a nutritionist, psychiatrists, acupuncturist, dentists and dental hygienists, pharmacists and pharmacy technicians, and medical office assistants. Our 4,600 active patients describe experiencing these realities:



- 25% homeless or unstably housed
- 64% living with mental health issues
- 62% living with problematic substance use
- 35% living with concurrent disorders
- 13% known to be living with HIV with 98% engaged in HAART Tx
- 30% known to live with HCV

## Acknowledgements

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