

N Belluzzo<sup>1</sup>, H Ngo<sup>2</sup>, E Venier<sup>1</sup>

<sup>1</sup>Addiction Medical Services, Toronto, ON, Canada; <sup>2</sup>Gilead Sciences Canada, Inc., Mississauga, ON, Canada

## Background

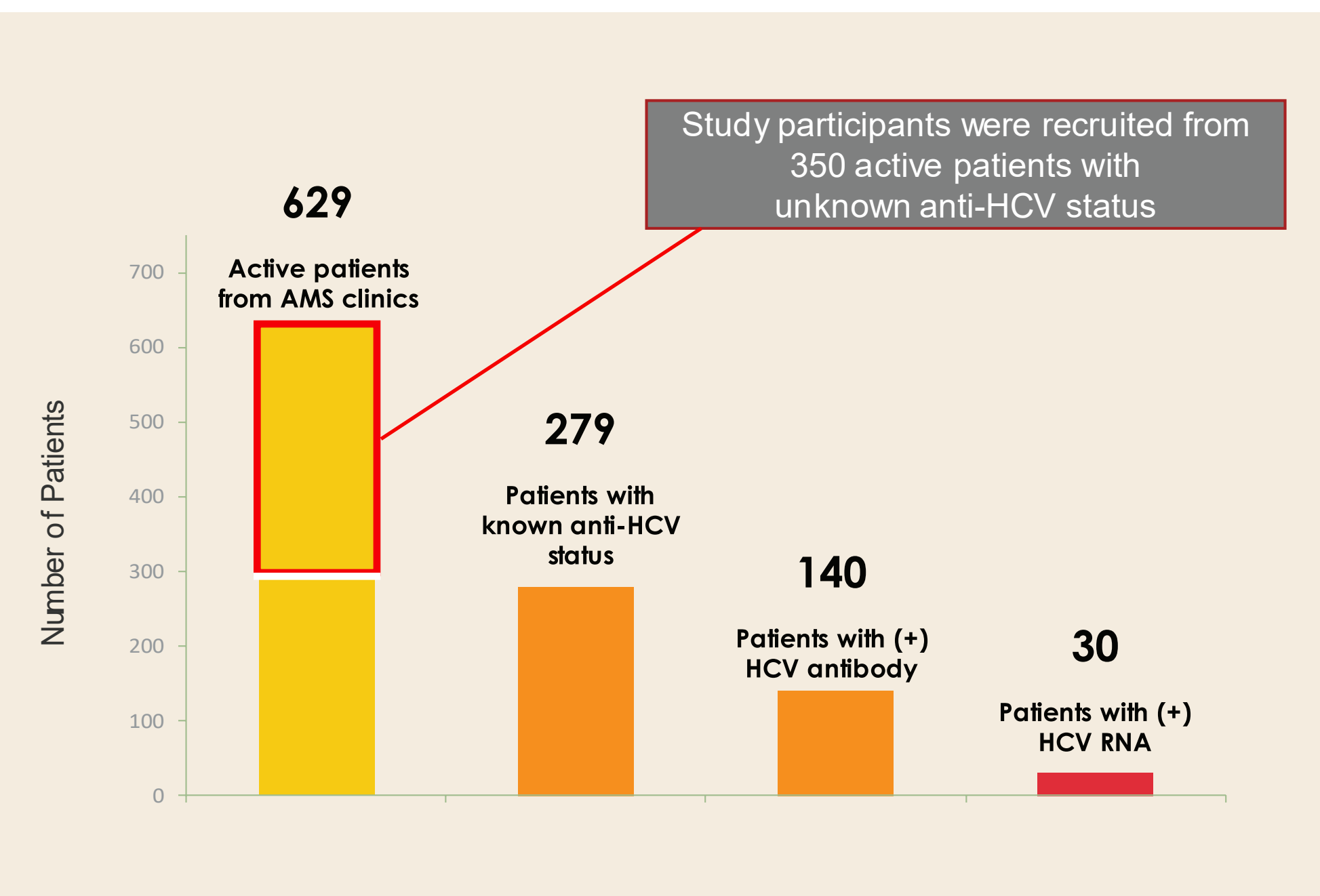
- People who use drugs (PWUD) remain underrepresented among those who have been evaluated and treated for HCV<sup>1-3</sup>. Patient-level barriers and facilitators specifically to HCV screening among PWUD are poorly described in the literature. Programs linking opioid substitution therapy (OST) and HCV treatment present valuable opportunities to examine patient-level factors that deter or motivate interest in HCV care.
- Addiction Medical Services (AMS) is a network of three clinics in Toronto, Ontario servicing over 600 patients on OST with methadone or buprenorphine. During patient intake, all patients are offered screening for hepatitis A, B and C as well as HIV. Patients who test positive for HCV antibody titres are offered further counselling and referral to onsite addiction medicine physicians who have experience in treating chronic HCV.

## Objective

- To investigate patient-level barriers and facilitators to screening among OST patients without recent (i.e., within the past 12 months) evidence of HCV screening

## Methods

- Individual semi-qualitative interviews were conducted by two addiction medicine specialists in a cohort of adult current and former illicit substance users receiving OST care.
- Using probes and follow-up questions, attention was focused on the factors that the patient saw as encouraging or discouraging in relation to HCV screening.
- The interview also included an initial set of questions to capture basic demographic information and relevant medical and illicit substance use history.
- Transcribed interviews were then coded using qualitative content analysis with MarketSight® software (Newton, MA).

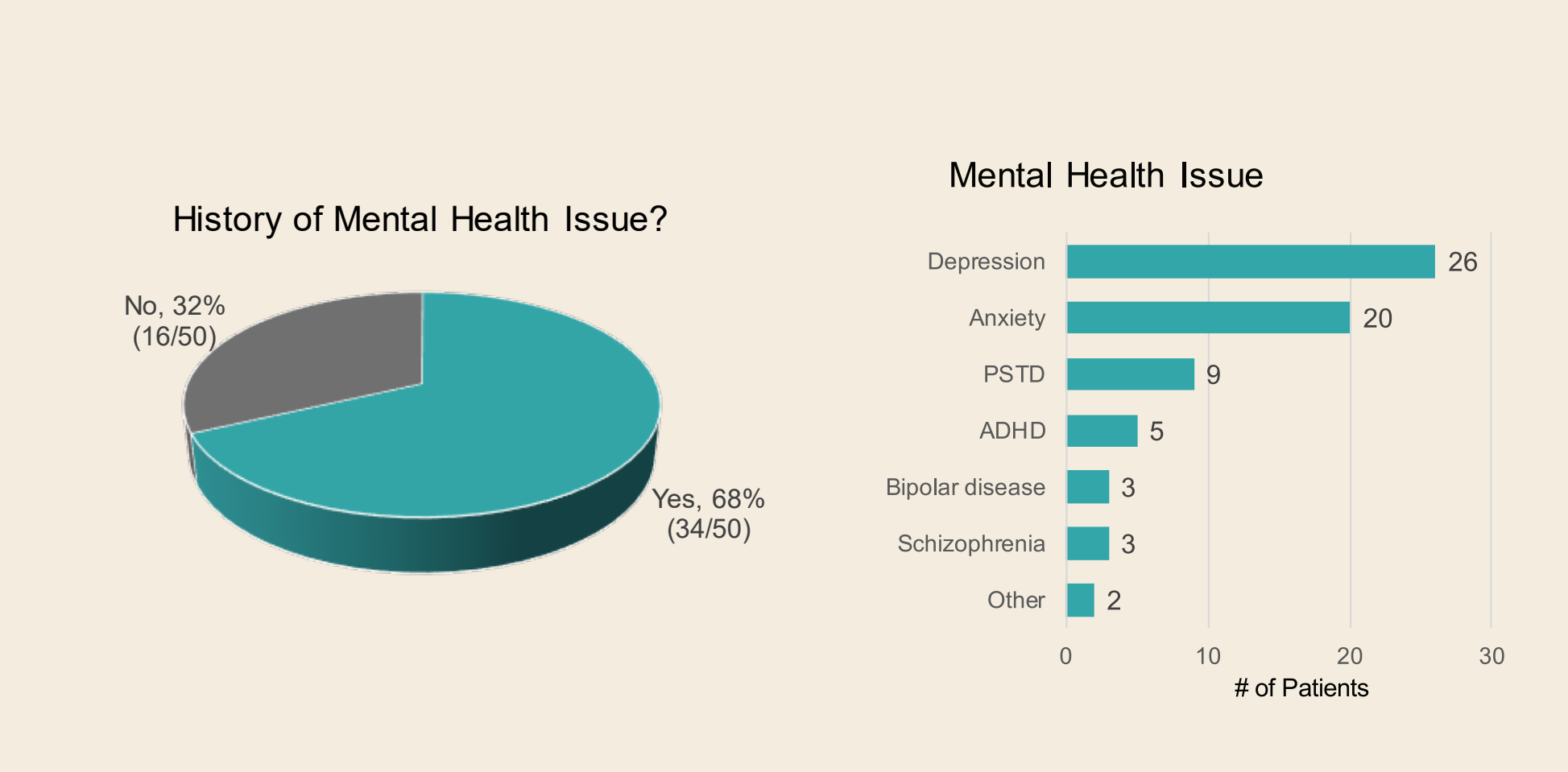


## Baseline Characteristics

Characteristic	N=50
Male, n (%)	37 (74%)
Age, median (range)	45 (26-67)
Education	
Did not complete high school	10 (20%)
High school	19 (38%)
Post-secondary	21 (42%)
Recipient of government financial support?	
Yes	30 (60%)
No	20 (40%)
Housing	
No fixed address (shelter/homeless on the street/doubling up)	5 (10%)
Non-subsidized housing	27 (54%)
Subsidized or supportive housing	16 (32%)
OST	
MMT, n (%)	42 (84%)
BMT, n (%)	8 (16%)

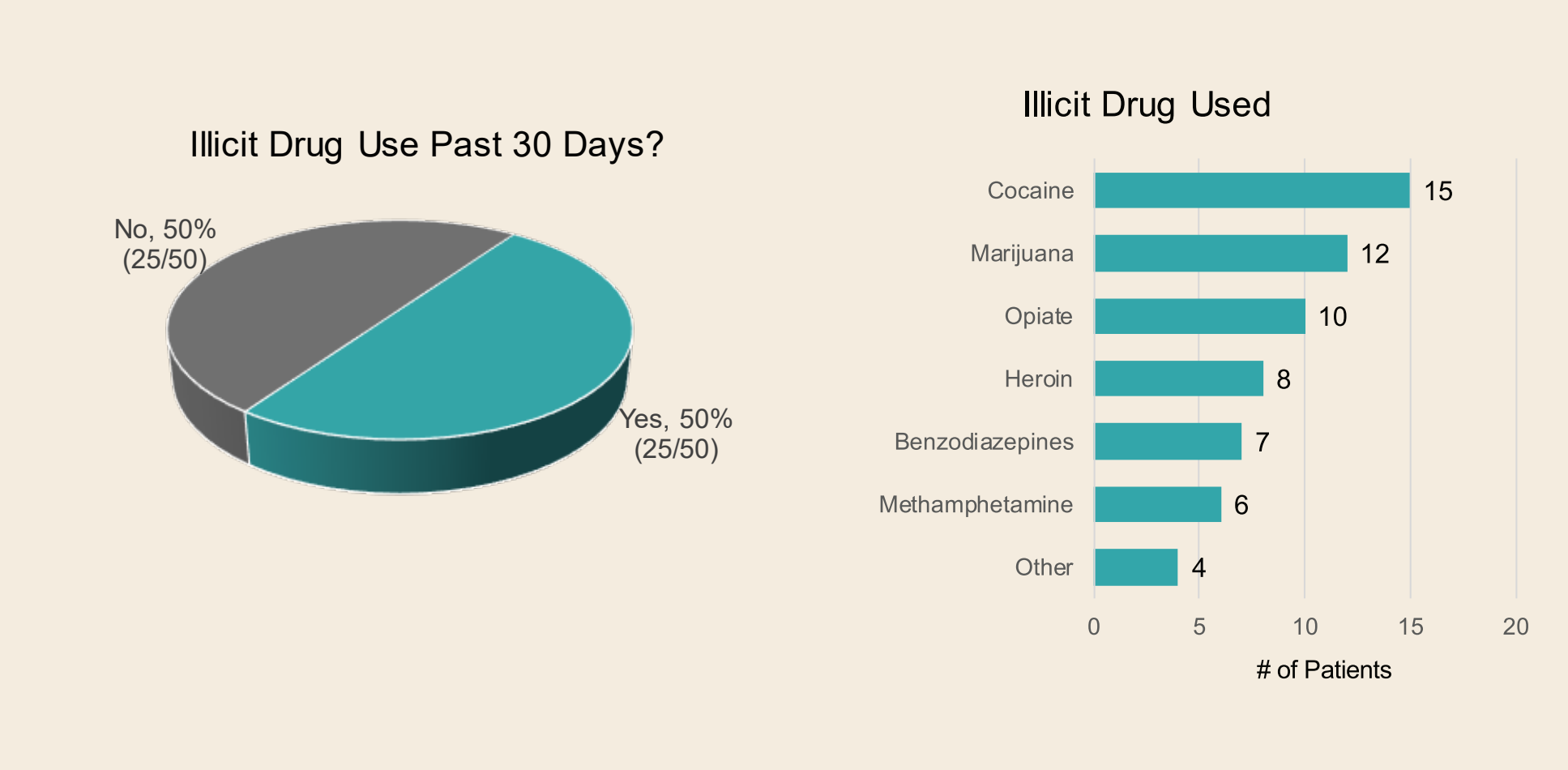
MMT = methadone; BMT = buprenorphine  
\*Housing data not obtained for two participants

## Baseline Characteristics: Psychiatric History

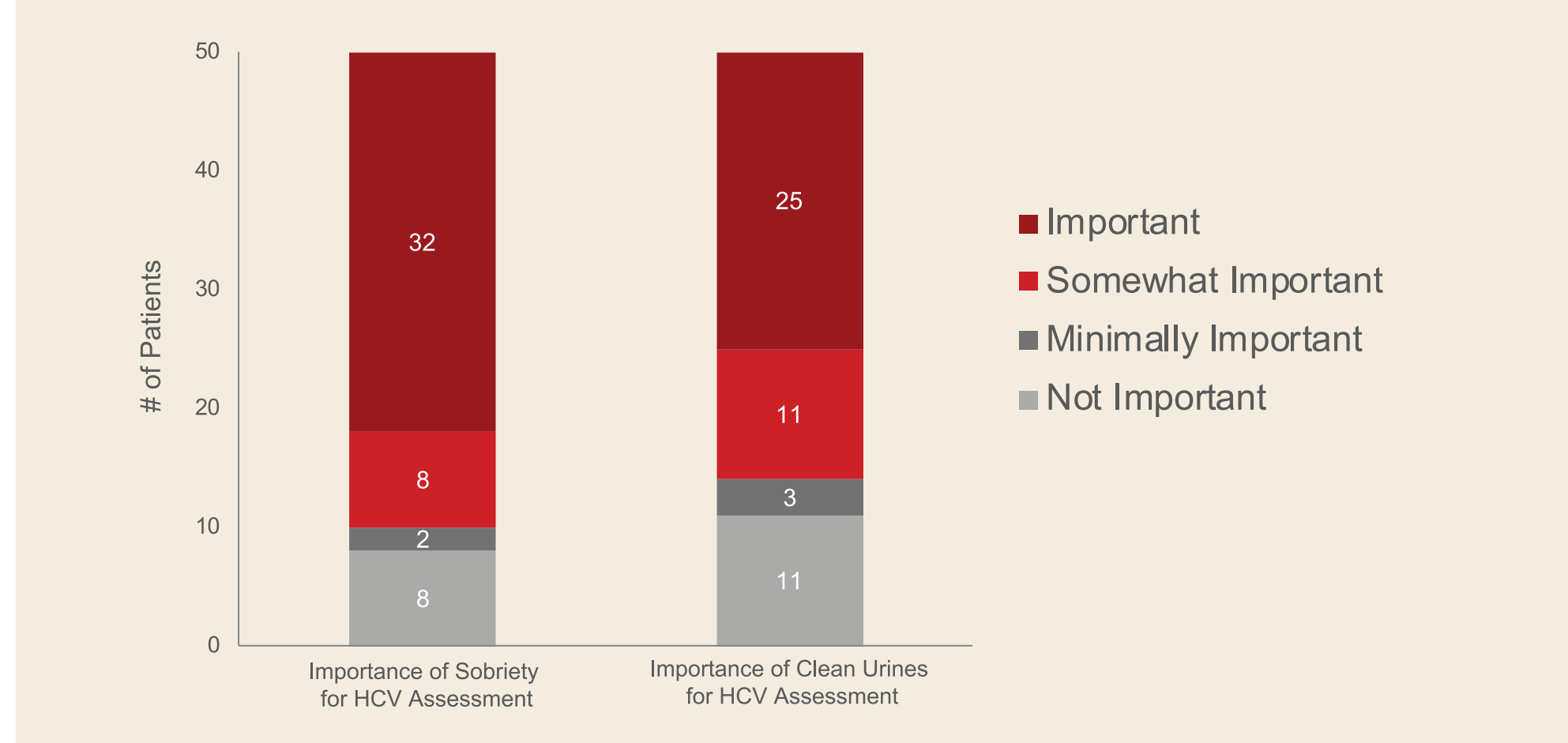


## Results

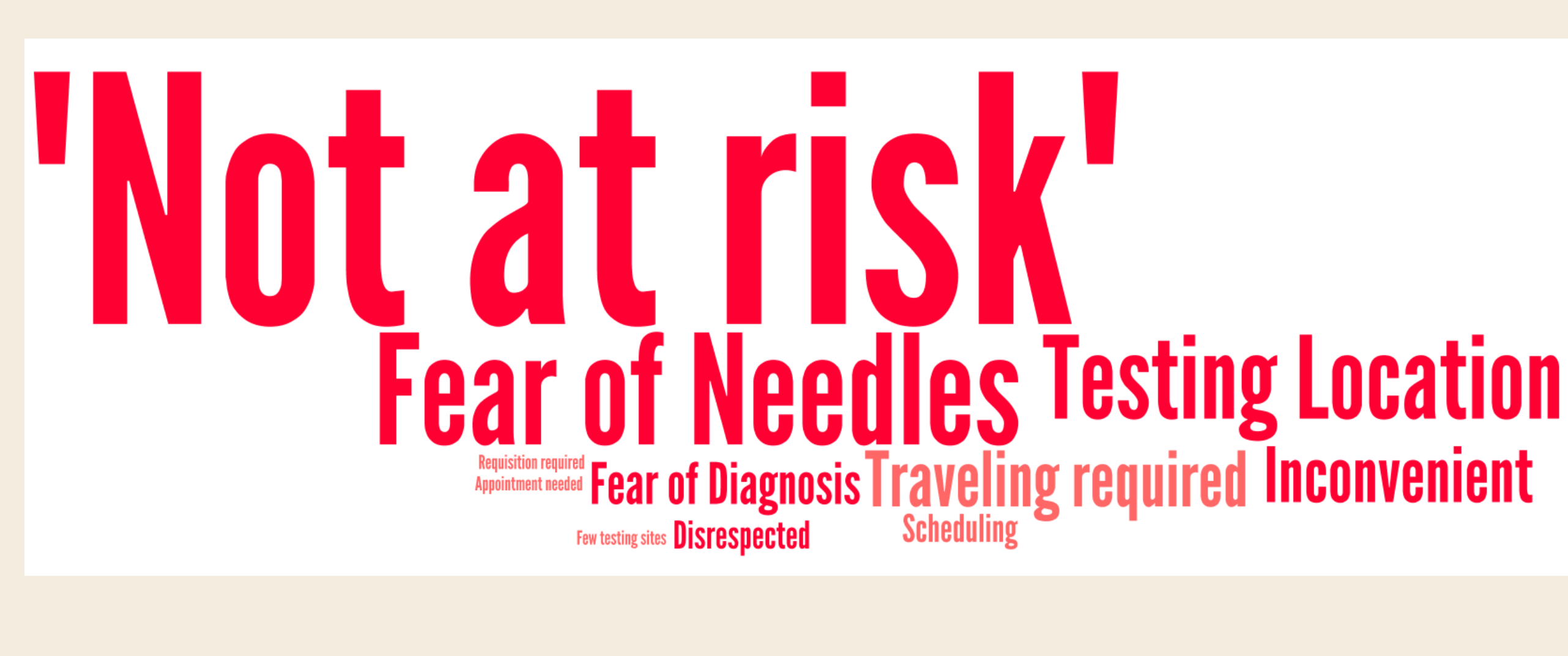
### Recent Illicit Drug Use



### Patient Perceptions Regarding Importance of Achieving Sobriety or Having Clean Urines Prior to HCV Assessment



### Patient-Reported Barriers to HCV Screening



### Patient-Reported Barriers and Facilitators

Barrier/Facilitator	Count	Percentage
Sample Size	31	
Perception: not at risk	18	58%
Anxiety: fear of HepC +ve diagnosis	3	10%
Testing Location	6	19%
Location: direction to site difficult	1	3%
Location: limited # of test sites	1	3%
Location: traveling required	4	13%
Fear of Needles	8	26%
Needle: dislike	2	6%
Needle: left mark	1	3%
Vein: difficulty getting blood	5	16%
Inconvenience	4	13%
Appointment required	1	3%
Cost: had to pay money	1	3%
Lab requisition required	1	3%
Time required: need to fit into schedule	2	6%
Disrespected	2	6%
Not treated with respect: test while incarcerated	1	3%
Treatment of HepC +ve individuals	1	3%

### Patient-Reported Facilitators: Self-Motivators



Facilitator	Count	Percentage
Sample Size	46	
Convenient Testing	12	26%
Blood work: done with other tests	5	11%
Convenient	2	4%
Procedure easy / not fearful: have some blood taken / needle	5	11%
Routine: have HepC test annually	1	2%
Test easily accessible	1	2%
Risky Behavior	15	33%
Change behaviour: engage in risky behaviour	6	13%
Change behaviour: interaction with HepC +ve person	2	4%
Change behaviour: unprotected sex	1	2%
Change behaviour: use drugs / share needle	5	11%
Enter into a new relationship: practice to get tested for everything prior to new relationship	2	4%
Symptomatic	6	13%
Change in health status: fatigue	3	7%
Change in health status: jaundice	1	2%
Change in health status: symptomatic	2	4%
Change in health status: take less care / don't look after myself	1	2%
Reduced Anxiety	19	41%
Peace of mind: HepC -ve / knowing HepC status	18	39%
Peace of mind: Natural HepC protection - enzyme	1	2%
Protect Others	3	7%
Protect others	1	2%
Protect others: kids	2	4%
Improve Overall Health	2	4%
Treatment Eligibility	7	15%
Disease Awareness	9	20%
Want to live to see family grow / look after family	2	4%

### Patient-Reported Facilitators: What HCPs Can Do



Facilitator	Count	Percentage
Sample Size	46	
"Tell me more"	5	11%
Information: HepC test offered at this clinic	1	2%
Information: identify clinics that do HepC testing	2	4%
Knowledge: clarify questions raised from this discussion	1	2%
Provide more information	1	2%
"Just do it"	9	20%
Insist / mandate regular testing	1	2%
Schedule appt. for patient	2	4%
Test at this site: here	4	9%
Have paperwork always available / provide requisition	2	4%
No delay in getting tested / right now	2	4%
Nothing	5	11%
Talk about it: ask / recommend / remind me	18	39%

## Conclusions

- Our analysis suggests that misconceptions among PWUD regarding eligibility for HCV care due to ongoing illicit drug use may contribute to perceived barriers with the screening process. Other common barriers include self-perception of risk, heightened anxiety regarding pending test results, fear and pain associated with phlebotomy and inconvenience of testing locations.
- Patient motivators in regards to HCV screening include supportive HCPs urging testing, reduced anxiety associated with knowing one's HCV status, changes in personal risk behaviors and symptoms suggestive of liver disease.
- In light of the high burden of mental illness in our cohort (68%), further research is warranted to evaluate the impact of depression and anxiety on HCV screening in PWUD.

## References & Acknowledgements

1. Mehta SH, Genberg BL, Astemborski J, Kavasery R, Kirk GD, Vlahov D, Strathdee SA, Thomas DL. Limited uptake of hepatitis C treatment among injection drug users. J Community Health 2008; 33: 126-133
2. Grebely J, Genoway KA, Raffa JD, Dhadwal G, Rajan T, Showler G, Kalousek K, Duncan F, Tyndall MW, Fraser C, Conway B, Fischer B. Barriers associated with the treatment of hepatitis C virus infection among illicit drug users. Drug Alcohol Depend 2008; 93: 141-147
3. Grebely J, Raffa JD, Lai C, Kraiden M, Kerr T, Fischer B, Tyndall MW. Low uptake of treatment for hepatitis C virus infection in a large community-based study of inner city residents. J Viral Hepat 2009; 16: 352-358

## Acknowledgements

We are grateful to Dylana Mumm and Anna Cumaraswamy with Gilead Sciences Canada Medical Affairs for their feedback on the study protocol and poster abstract