

# Treatment with direct acting antivirals leads to increased uptake of Injecting Equipment Provision (IEP), and low rates of reinfection: results from a Scottish Cohort

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## INTRODUCTION

A cohort of 90 GT3 F2/3 treatment naïve patients, treated with 8 weeks of sofosbuvir/velpatasvir prior to October 2017, have been previously described.<sup>1</sup>

- 55% had self reported or urine screen evidence of drug use pre treatment
- High Intention to treat (95.6%) and per protocol (100%) SVR rates were described
- One patient experienced re-infection with subsequent spontaneous clearance between end of treatment and SVR 12

## AIMS

We sought to examine whether utilisation of injecting equipment provision (IEP) changed following treatment, and examine re-infection rates with longer follow up.

## METHODS

- The cohort was linked to the needle exchange database (NEO) using a standard identifier
- Information on numbers registered with NEO was recorded
- For the 3 months prior to treatment (PRE) and 3 months post completion of treatment (POST) anonymous data was obtained on number of patients accessing IEP, number of transactions and number of injecting kits and foil obtained

## RESULTS

Table 1: Patient characteristics

	n=90
Male (%)	72 (80)
Mean age (SD)	45 (8.4)
Fibrosis stage	
F0/1 (LSM <7.0kPa)	2 (2.2)
F2 (LSM >6.9 & <9.5kPa)	60 (66.7)
F3 (LSM ≥ 9.5 and <12.5kPa)	28 (31.1)
Mean LSM (SD)	8.8 (±1.5)
Mean Viral Load (SD)	5.7 log iu/ml (±0.9)
Viral load > 6 million	6 (6.6%)
HIV co-infected	3 (3.3)
HBV co-infected	1 (1.1)
Incarcerated	5 (5.5)
On opioid replacement therapy (ORT)	82 (91.1%)

Acknowledgements: We wish to thank Ms Elaine Cadzow, HCV Database supervisor for help in extracting data.

## RESULTS

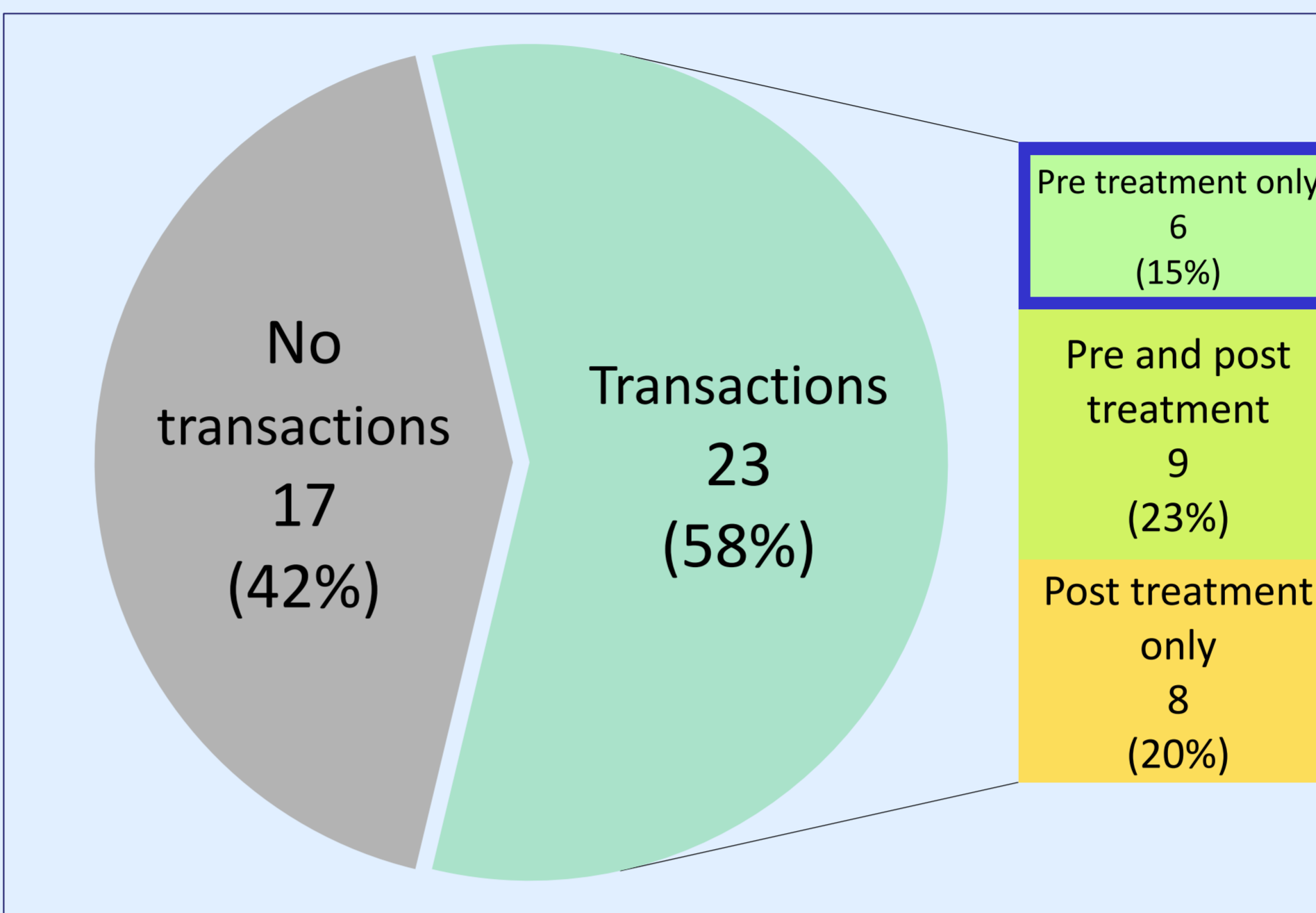


Figure 1

- 40 (44.4%) of patients were NEO registered
- The majority of those registered conducted a transaction

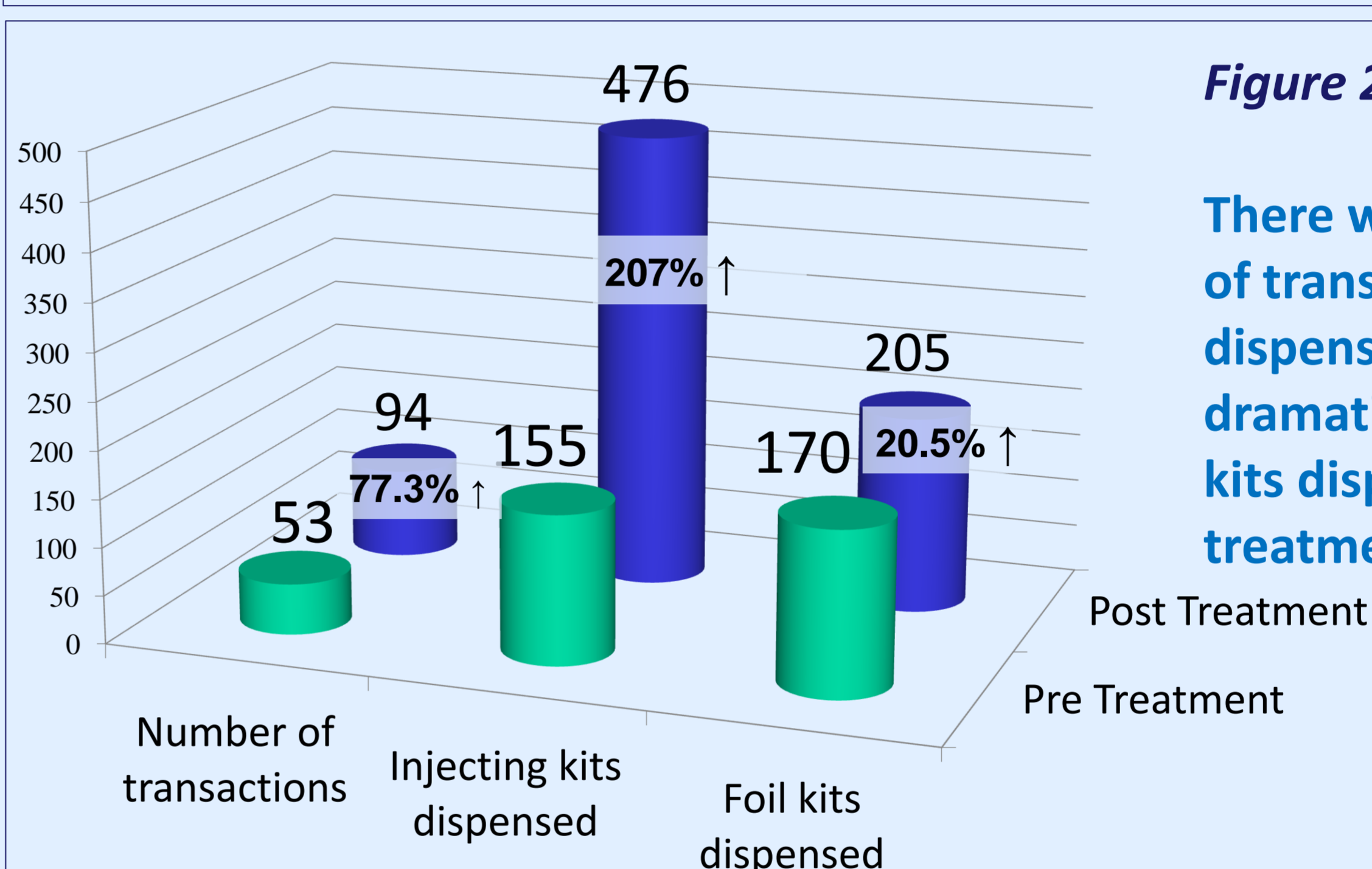


Figure 2

There were increases in number of transactions, number of foils dispensed and, most dramatically, number of injecting kits dispensed in the post treatment period.

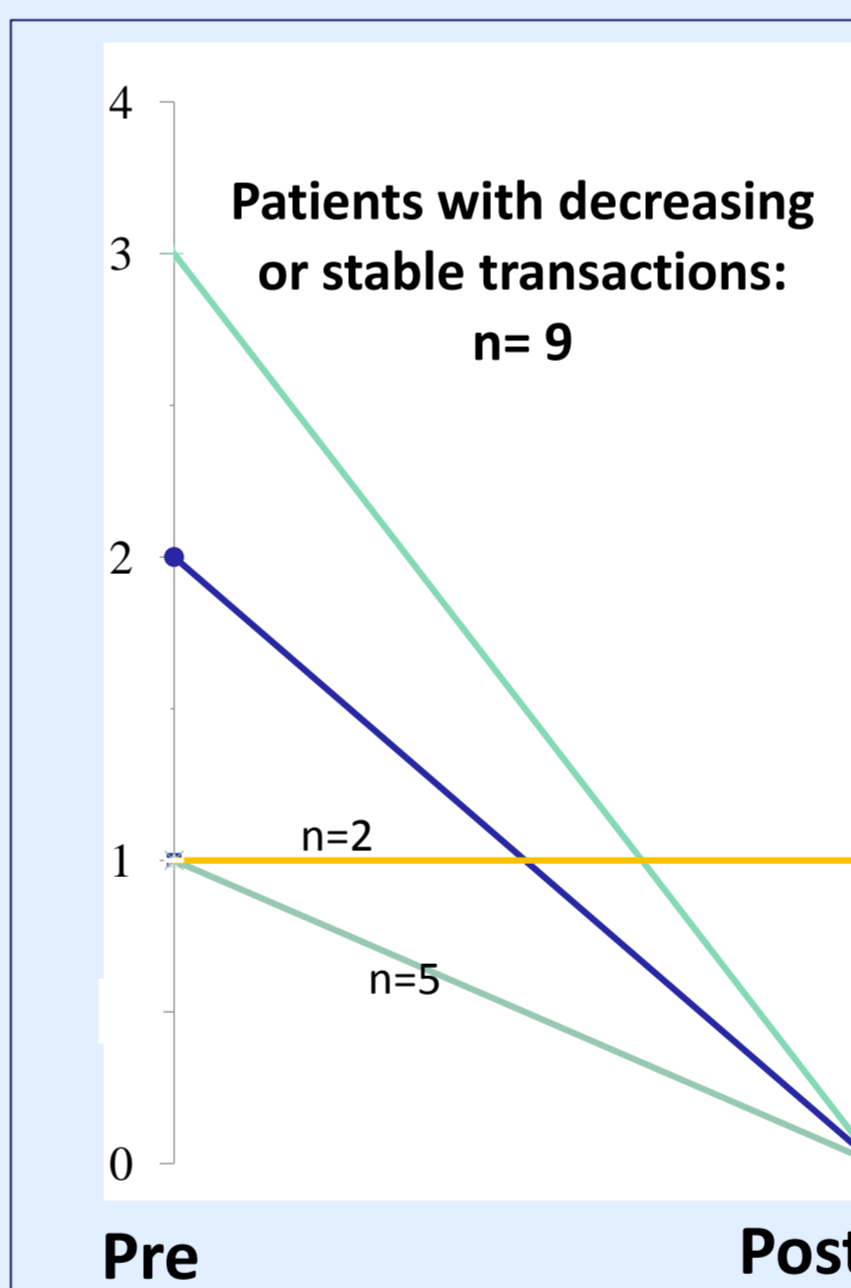
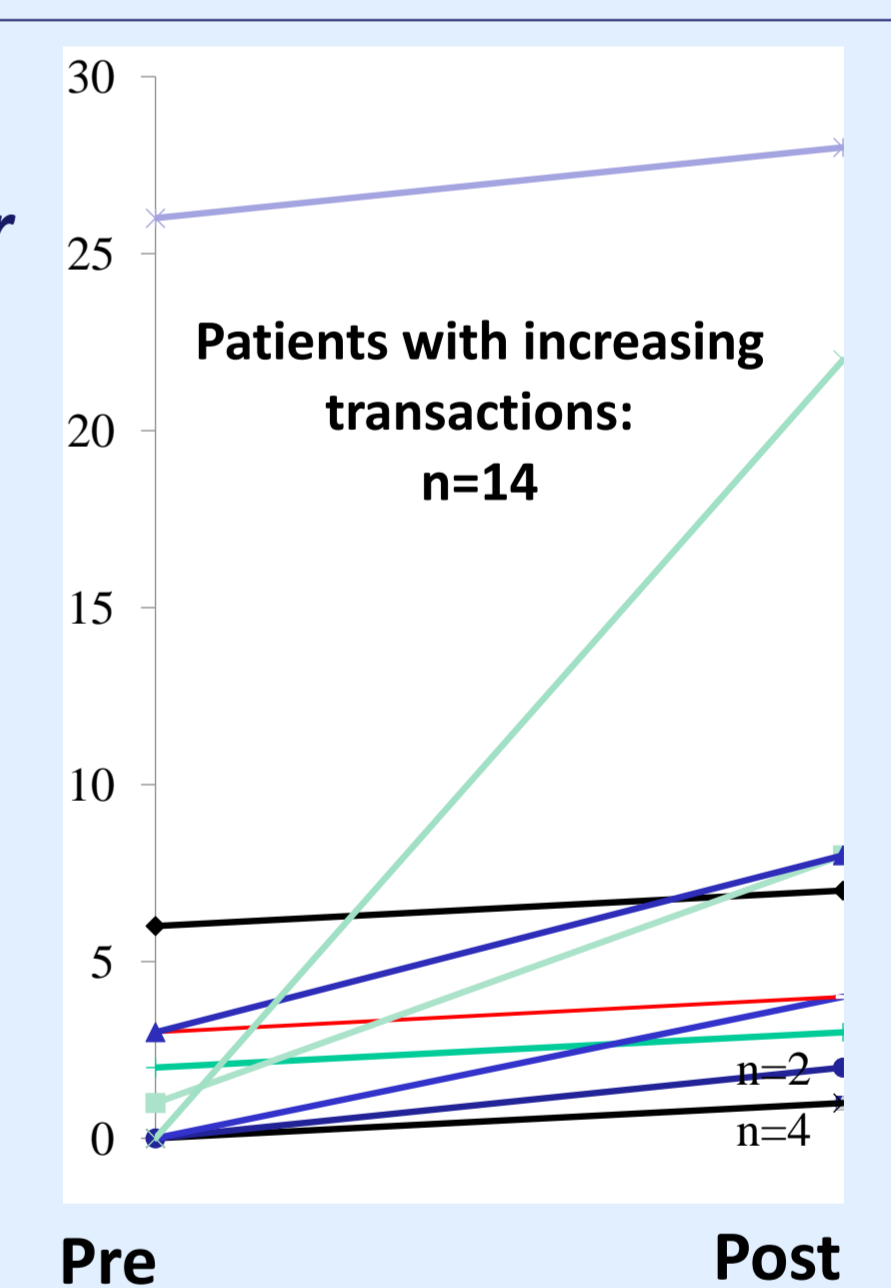


Figure 3

(NB each line represents a single user unless otherwise stated)

Within the overall increase in transactions, there was individual variation with 9 patients displaying stable or decreasing transactions



## SVR 12:

Intention to treat SVR 12: 86/90 (95.6%) Per protocol\* SVR 12: 86/86 (100%)

[\*Excluding 2 patients who prematurely discontinued, 1 patient who died, and 1 patient with re-infection and subsequent spontaneous clearance]

## Post SVR 12:

- 67 (77.9%) SVR12 patients had a further test ≥ 17 weeks post treatment (mean 27, range 17-45 weeks)
- 66/67 (98.5%) remained PCR negative
- One patient experienced low level viraemia (13 iu/ml) with 2 subsequent negative samples, in keeping with reinfection with spontaneous clearance

## CONCLUSIONS

- High SVR rates achieved in a cohort with high levels of drug use
- The post treatment period demonstrated increased utilisation of IEP amongst the cohort, suggesting that engagement in treatment and care may be beneficial in promoting safer injecting practice
- To date, no confirmed cases of persistent re-infection have occurred

## Reference:

1. Boyle A, et al. 8 weeks sofosbuvir/velpatasvir in genotype 3 patients with significant fibrosis: Highly effective amongst an OST cohort. J Hepatol 68, S20.