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Background and aims

Majority of HCV positive individuals in England are people who inject drugs (PWID). HCV elimination by 2030 will be impossible without engaging them. This mandates a community based "find and treat" strategy.

Methods

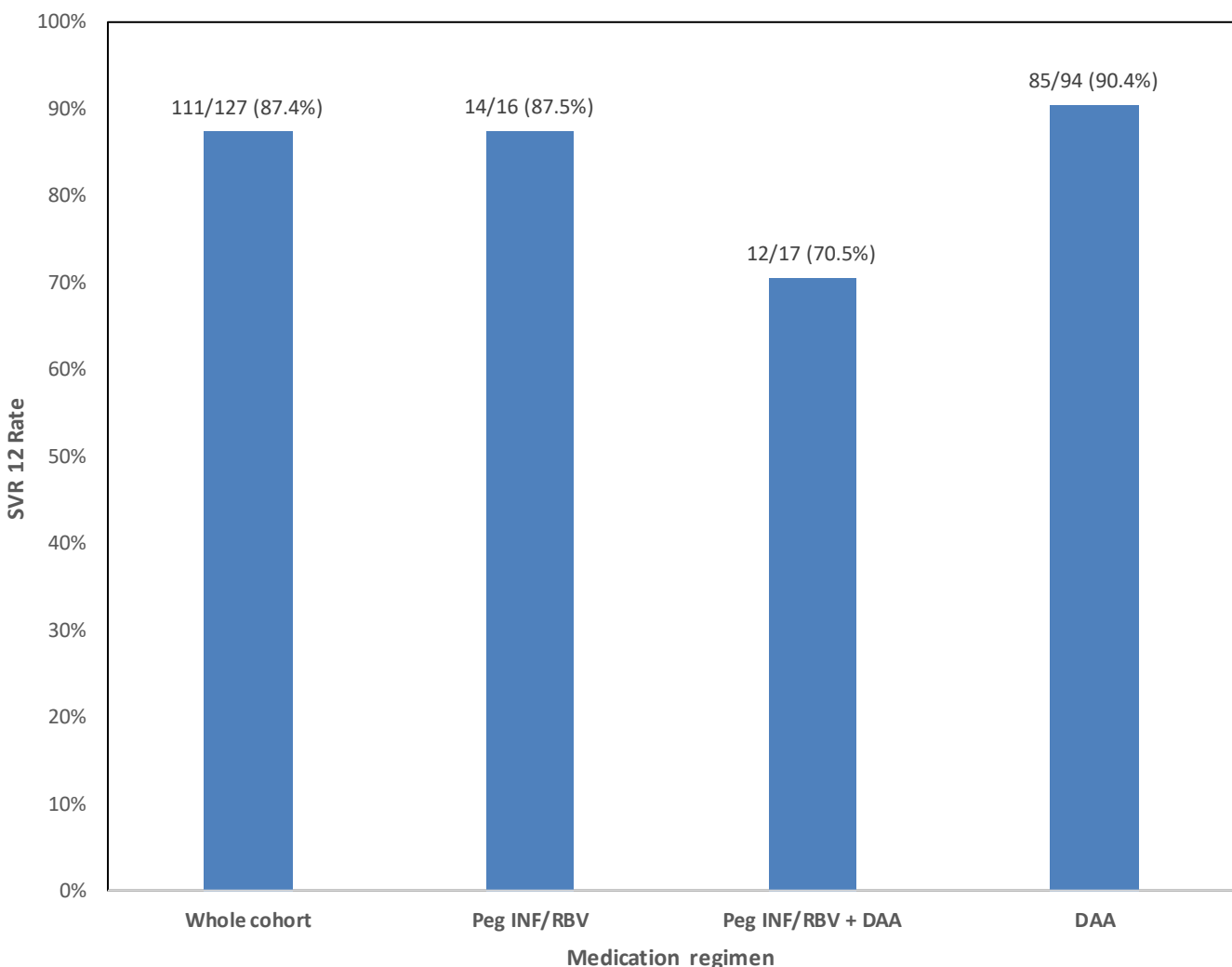
Eight-year study (2013-2021) conducted at a substance misuse service in SE England. Individuals offered dry blood spot testing (DBST), transient elastography (TE), HCV treatment and assessment of patient reported (SF-12v2, SFLDQOL) and health economic (HE) (EQ-5D-5L) outcomes.

Results

Table 1: Baseline data in whole cohort and in those with a positive PCR (treated vs. not treated)

	Whole cohort (n=573)	HCV PCR positive n=259		P value treated vs. untreated
		Untreated cohort (n=134)	Treated cohort (n=125)	
Age	40.5 +10.0	40.9 +9.6	45.1+9.1	p=0.0005
Age < 40	290 (50.6%)	64 (47.8%)	40 (32.0%)	p=0.010
Age > 60	21 (3.7%)	6 (4.5%)	9 (7.2%)	p=0.349
Gender				
Female	111 (19.4%)	24 (17.9%)	23 (18.4%)	p=0.919
Male	462 (80.6%)	110 (82.1%)	102 (81.6%)	
Ethnicity				
White British	523 (91.3%)	122 (91.0%)	114 (91.2%)	p=0.965
IDU ever				
Yes	411 (71.7%)	123 (91.8%)	115 (92.0%)	p=0.951
No	162 (28.3%)	11 (8.2%)	10 (8.0%)	
Current IDU				
Yes	178 (31.1%)	65 (48.5%)	42 (33.6%)	p=0.015
No	395 (68.9%)	69 (51.5%)	83 (66.4%)	
Ever drank alcohol	505 (88.1%)	124 (92.5%)	111 (88.8%)	p=0.300
Currently drinking >21 units/wk	214 (37.4%)	63 (47.0%)	31 (24.8%)	p<0.001
	134 (23.4%)	16 (12.0%)	25 (20.0%)	p=0.013
Unstable housing	289 (50.4%)	79 (59.0%)	50 (40.0%)	P=0.002
Currently on OST	299 (52.3%)	96 (72.2%)	88 (70.4%)	p=0.752
Psychiatric diagnosis	288 (50.3%)	86 (64.1%)	81 (64.8%)	p=0.917
Uptake of BBV testing	558/573 (97.4%)			
HBcAB positive	95 (18.2%)	35 (30.7%)	33 (29.7%)	p=0.874
HCV ab positive	323 (57.9%)			
PCR positive	259/323 (80.2%)			
Genotype		(n=118)	(n=123)	
1	2 (0.83%)	0 (0%)	2 (1.6%)	p=0.308
1a	111 (46.1%)	61 (51.6%)	50 (40.7%)	
1b	5 (2.1%)	2 (1.7%)	3 (2.4%)	
3	111 (46.1%)	51 (43.2%)	60 (48.8%)	
Accepted fibroscan	254/259 (98.1%)	129 (96.2%)	125 (100%)	
Underwent fibroscan	220/254 (86.6%)	95 (73.6%)	124 (99.2%)	p<0.001
F0-F1 (<7.1 kPa)	115 (52.5%)	64 (67.3%)	51 (41.1%)	
F2-F3 (> 7.1-11.9 kPa)	51 (22.2%)	20 (21.1%)	31 (25.0%)	
F4 (> 12 kPa)	53 (24.2%)	11 (11.6%)	42 (33.9%)	p<0.001

Fig 1: SVR12 rates in the treated cohort (Intention to treat analysis)



SVR 12 data available in 124 of whom three treated twice so 127 treatment outcomes presented

Fig 2a: Mean improvements in SF-12 scores with standard error bars (N=85)

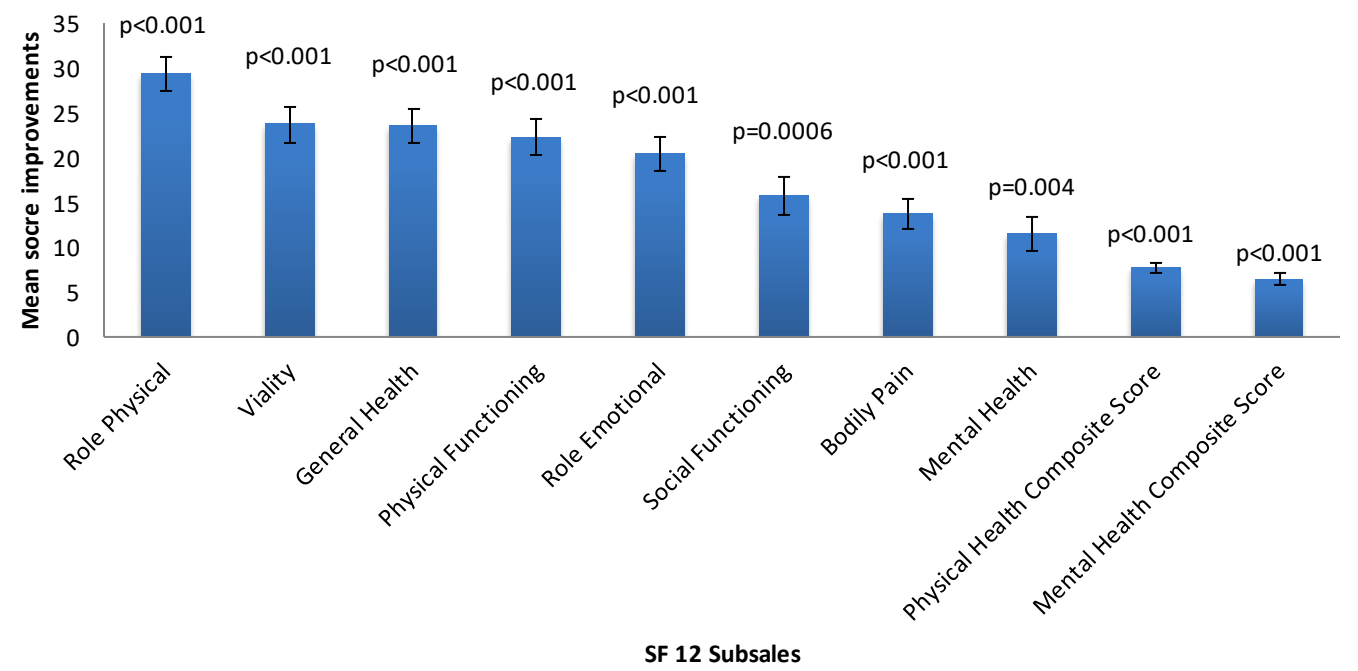
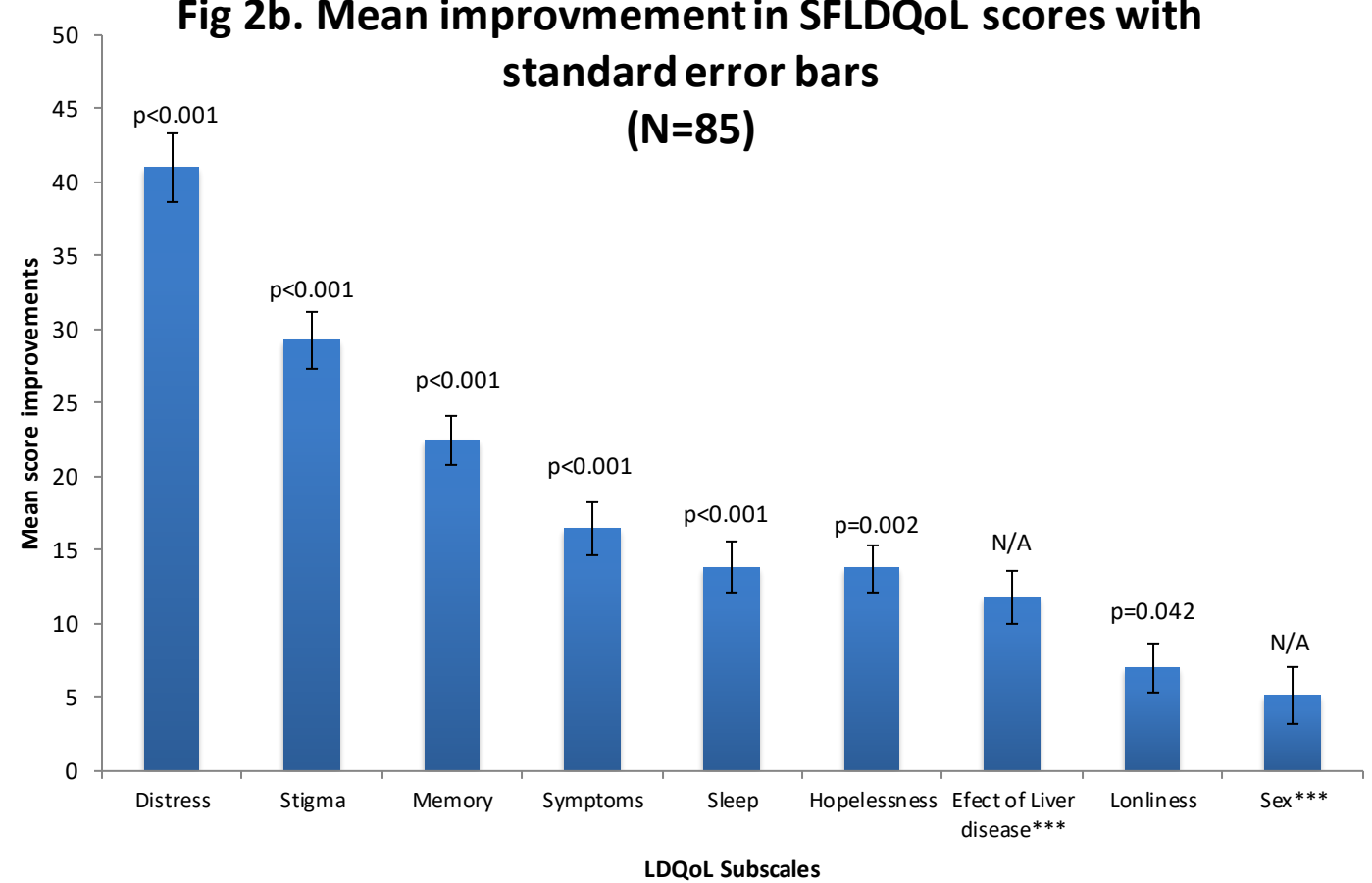


Fig 2b. Mean improvement in SFLDQoL scores with standard error bars (N=85)



EQ-5D-5L

Mean pre-post change in VAS scale = 19.27 se = 2.13 p < 0.001

Mean pre-post change in index = 0.058 se = 0.03 p = 0.0137

Summary costs for screening and treatment of Hepatitis C in a community clinic setting

Number of patients presenting at Clinic, suspected of HCV (N=573)	
5 Mins of drug misuse Nurse to offer BBV (£) unit	£4.20
Screened for HCV (DBST) (BBV offer uptake) (N=558)	
10 Mins of drug misuse Nurse for DBST (£) unit	£8.30
DBST cost HCV, HepB, HIV (£)	£12
Qualitative PCR (for those HCV+) (N=259)	£50
HCV PCR Positive (N=259)	
Weighted average Cost per Qualitative PCR screen positive (£)	£103
Patients who progressed to treatment (N=125)	
Weighted average cost per case treated (including screening costs)	£8,740

*Treatment costs include clinic activity (£1,303 per person over average 10 attendances), liver scans, home visits, tests, referrals, consultant reviews and treatment (medication £7,224 per person). Estimates based on N=75 under treatment with activity recorded. All figures are preliminary.

Conclusions

- ◆ Community-based HCV treatment of vulnerable adults results in SVR12 rates comparable to secondary care with 96% compliance and significant improvement in patient reported outcome measures
- ◆ HCV screening and clinic costs low compared to medication costs
- ◆ Our data endorse the need for "one-stop" community based models of care to help pave the way for HCV elimination

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