

Role of peer support in a national UK hepatitis C elimination program

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Conflicts of Interest

Professor Foster has received speaker and consultancy fees from Abbvie, Gilead, GSK, MSD

Funding for peers was provided by Abbvie, MSD and Gilead, chiefly as part of the NHSE HCV elimination competitive procurement

Data was analysed independently

Peers and Hepatitis C Elimination

Background (i)

- Eliminating HCV infection will require treatment for the majority of infected people
- Many infected people (e.g. drug users, prisoners, the homeless) suffer from low self esteem and fear discrimination
- Overcoming barriers to drug access is critical for HCV elimination

Peers and Hepatitis C Elimination

Background (ii)

- Peers are support workers with lived experience of a disease who go on to perform outreach
- Shown to be of benefit for improving access to therapy in mental health, cancer and HIV
- Previous studies have explored the use of peers in HCV but there is no unequivocal evidence of benefit

Peers and Hepatitis C Elimination

Aims

To assess the impact of a nationwide program of peer supporters for people with hepatitis C with respect to:-

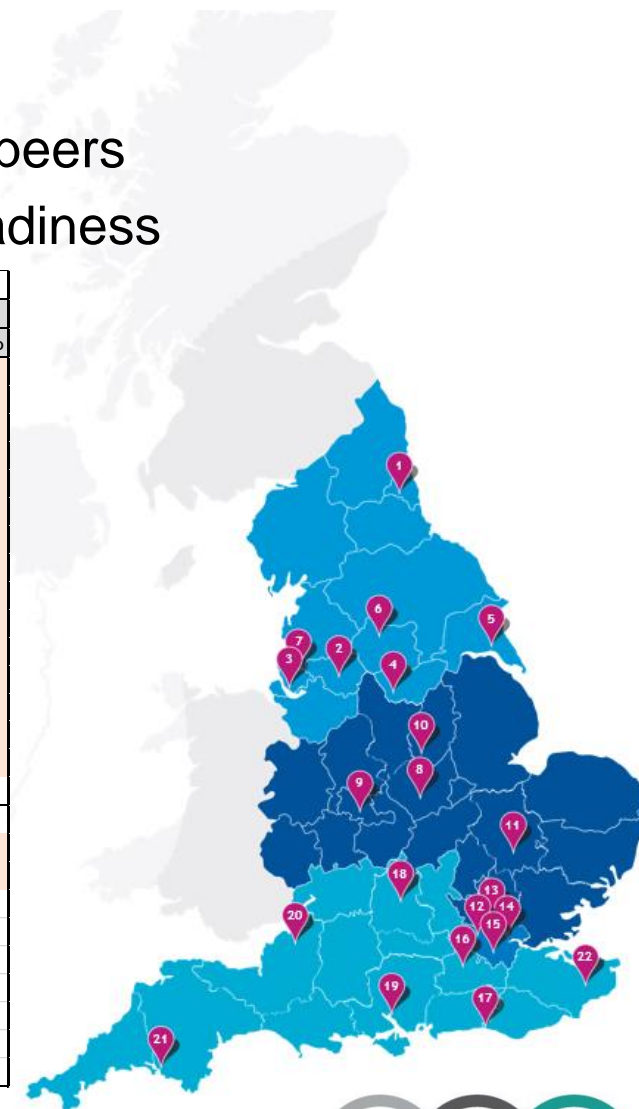
- Numbers accessing antiviral therapy
- Numbers completing a course of therapy
- Numbers of treatment failures

Outputs were analysed by use, or not, of illicit drugs and by treatment setting

Peers and Hepatitis C Elimination Methods

Therapy in England is provided by 22 networks – 17 had peers
Each was provided with a peer based on administrative readiness

	Date of Peers																															
	2017					2018												2019												2020		
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	
Peer ODNs																																
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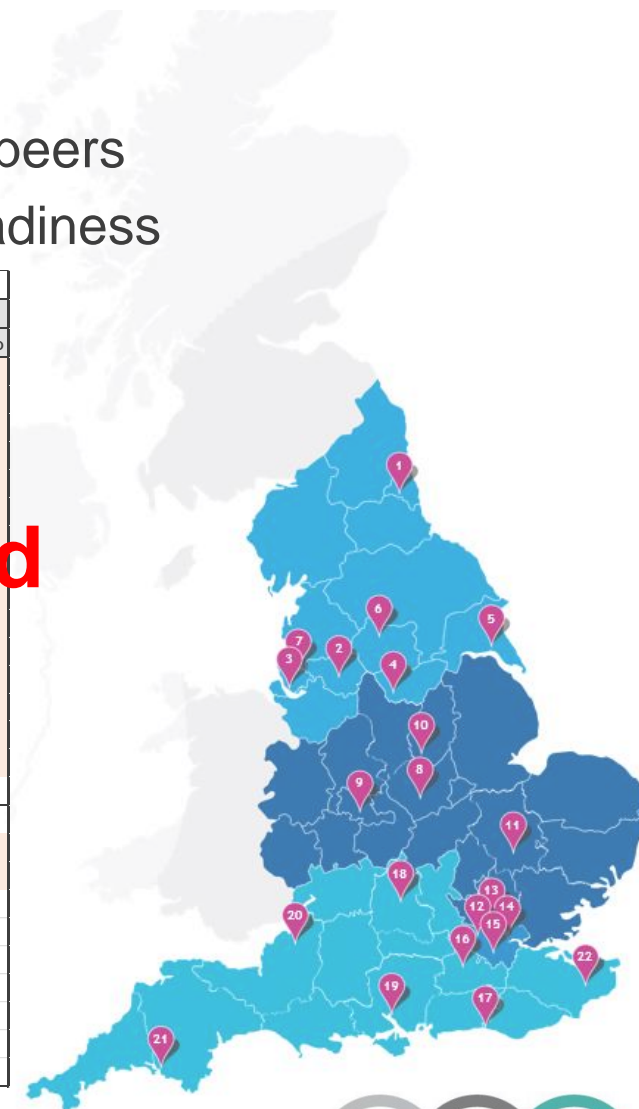


Peers and Hepatitis C Elimination Methods

Therapy in England is provided by 22 networks – 17 had peers
Each was provided with a peer based on administrative readiness

This was a pseudo-randomized introduction of peers

	Date of Peers																														
	2017					2018								2019								2020									
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Peers and Hepatitis C Elimination

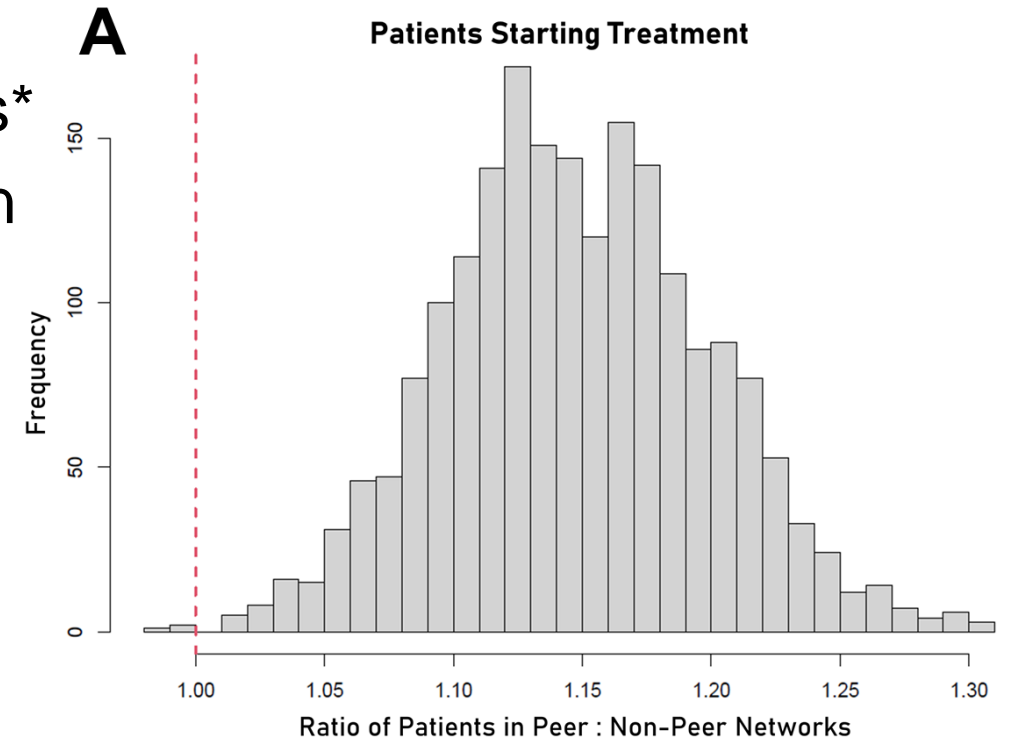
Methods - What do peers do?

- Peer coordinators were centrally trained by The Hepatitis C Trust
- Volunteers peer support workers conducted 1-to-1 outreach
- Delivered educational talks followed by point-of-care antibody tests

Peers and Hepatitis C Elimination

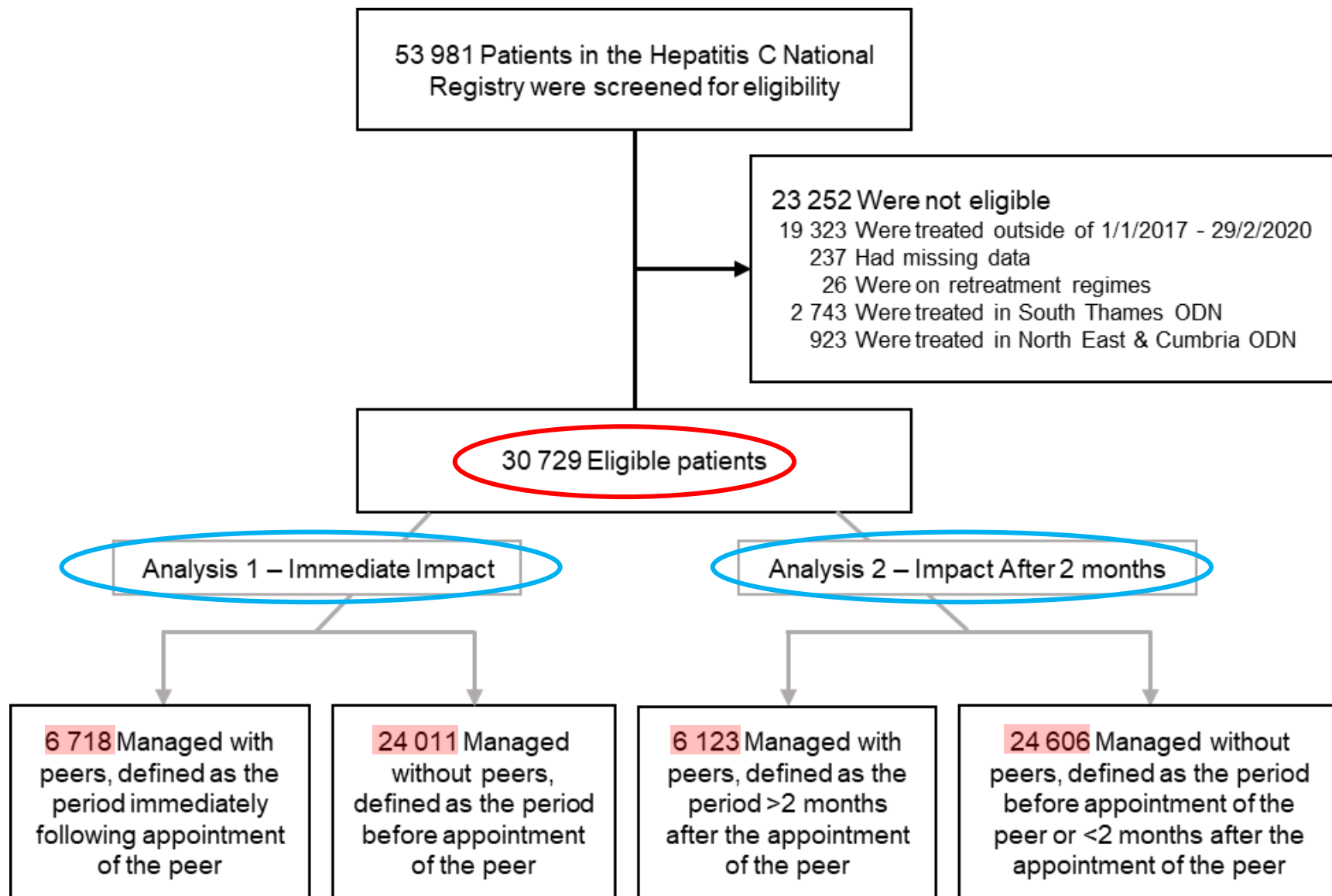
Accounting for temporal effects

- To account for temporal variation we used approaches developed for stepped wedge trials*
- Count outcomes analysed by Bayesian Poisson mixed effects model
 - Generated relative ratios (RR)
- Proportion outcomes analysed by Bayesian Binomial mixed effects model
 - Generated odds ratios (OR)



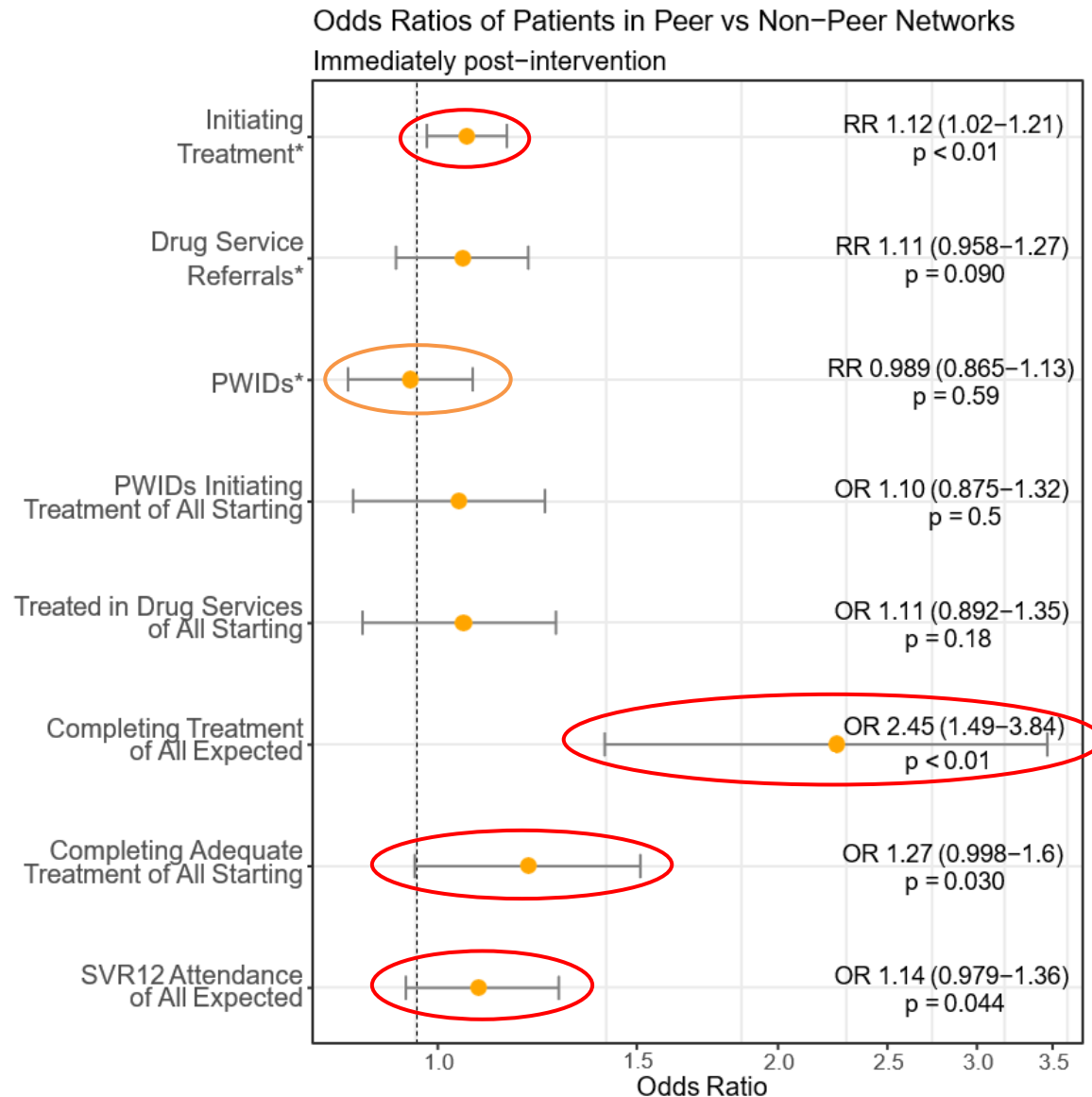
*Kennedy-Shaffer et al. in *'Novel methods for the analysis of stepped wedge cluster randomized trials'* (2020)

Peers and HCV - Consort Diagram



Peers and Hepatitis C Elimination

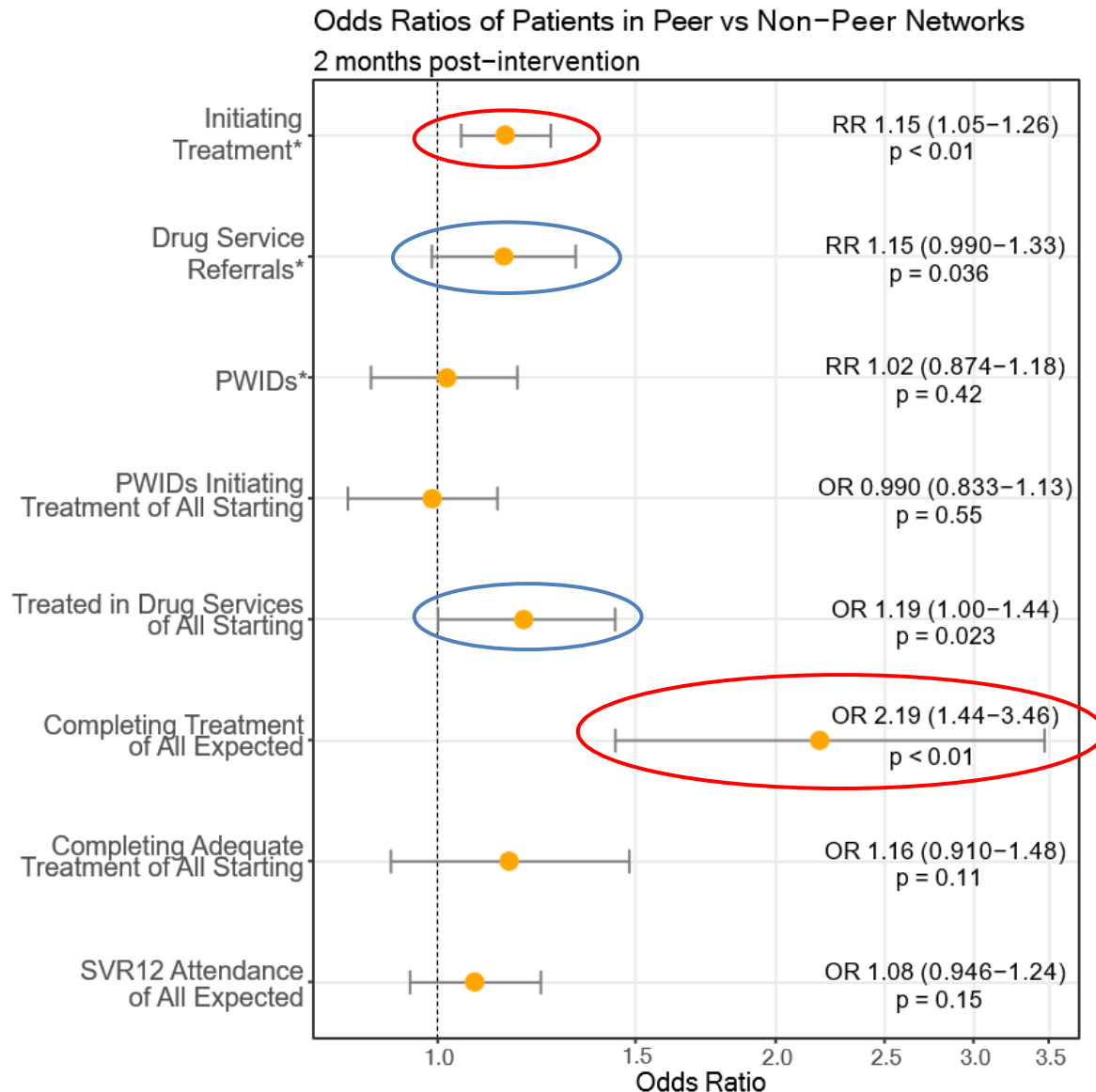
Results – Immediate impact



- 1.12 RR of initiating treatment in peer groups
 - But no change in PWID engagement?
- 2.45 OR of completing treatment
- 1.27 OR of completing an adequate treatment course
- 1.14 OR of attending for SVR12

Peers and Hepatitis C Elimination

Results – impact 2 months onwards



- 1.15 RR of initiating treatment
- 2.19 OR of completing treatment
- 1.15 RR of referrals from drug services
- 1.19 OR of patients being treated in drug services

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Results – Treatment Failure Rates

Outcomes recorded at SVR12 follow-up

		Immediate				2 months			
		Peer	Range or %	Non Peer	Range or %	Peer	Range or %	Non Peer	Range or %
Outcome	Breakthrough	9	0.1	59	0.25	7	0.11	61	0.25
	Death after initiating treatment	76	1.0	216	0.92	63	1.03	229	0.93
	Death after SVR12	1	0.0	13	0.06	0	0.00	14	0.06
	Did not commence treatment	42	0.6	118	0.50	31	0.51	129	0.52
	Death before commencing treatment	2	<0.01	14	0.06	2	0.03	14	0.06
	Lost to follow up	1178	16.2	3508	15	987	16	3699	15
	Non-response	44	0.6	196	0.84	35	0.57	205	0.83
	Relapse	81	1.1	461	2	65	1	477	2
	SVR 12	3060	42	16412	70	2625	43	16847	69
	Other	89	1.2	289	1.23	79	1.29	299	1.22
	Not Completed	2707	37	2154	9	2229	36	2632	11
	→ Ineligible for SVR12	2205	81	1023	47	1752	79	1476	56
	→ Data blanks	502	19	1131	53	477	21	1156	44

Peers and Hepatitis C Elimination Summary

- Largest study of the impact of peers in hepatitis C
- Immediate effect of peers:
 - Beneficial for engagement in treatment – both initiation and completion
 - Suggests peers motivate staff and mitigate unconscious bias
- Delayed effect:
 - Benefits emerging in drug services – increased referrals and treatment

Peers and Hepatitis C Elimination Limitations

- Non-random deployment of peers in networks
- Less data on later treatment outcomes in peer groups e.g. viral clearance at 12 weeks
- Registry data not validated but completion is contractually obligated

Peers and Hepatitis C Elimination

Conclusion

- Peers have an immediate effect at improving initiation and completion of treatment
- Proportion of injecting drug users commencing treatment did not change, but peers appear to increase referrals and treatment within drug services
- Peers are effective in engaging at-risk groups for treatment of HCV and could accelerate attainment of elimination targets

Acknowledgements & Contributions

- We are thankful to all of the patients who have agreed to participate in our research
- We are indebted to the clinicians and staff of the operational delivery networks who managed the patients and recorded their data.
- We are grateful to the peers and their trainers at the Hepatitis C Trust
- We are grateful to Ceri Townley and the Arden and Gem Commissioning team for assistance and management of the NHSE HCV database.



- Thank you for listening! Please direct any questions to d.v.jugnarain@smd17.qmul.ac.uk