

Everyone in: hepatitis C screening for rough sleepers accommodated during the COVID-19 pandemic in Somerset, England

WHO is aiming for the eradication of the hepatitis C virus (HCV) as a global health threat by 2030. However, concerns have been raised about how the COVID-19 pandemic may affect eradication efforts.¹

One long-standing barrier to achieving the WHO goals is the high prevalence of HCV in marginalised populations.² Homelessness is a significant risk factor for HCV infection in the UK, with chronic prevalence in this group estimated at 29%.³ Homeless people diagnosed with HCV infection are also less likely to complete treatment. The reasons for this are complex, but involve mistrust of medical services, inflexibility of secondary care pathways and geographic mobility.⁴

During the COVID-19 pandemic, homeless people across Somerset were housed in temporary accommodation through the national 'Everyone in' initiative. This provided a unique opportunity for eradication efforts by reducing the geographic mobility of this population, and provided a setting in which HCV patients could be managed. In this letter, we describe a targeted multidisciplinary programme to identify and treat HCV infection within the Somerset homeless population.

Across Somerset, 137 homeless people were accommodated in 8 settings. Healthcare link workers opportunistically offered dried blood spot tests (DBSTs) to all residents, screening for HCV. Patients testing positive for HCV RNA were reviewed in a one-stop clinic by hepatology specialist nurse. Blood tests for viral load and genotyping were taken and a

Table 1 Screening results

Demographics	No	Percentage			
Total screened	103	/			
Gender					
Male	68	66.0			
Female	35	34.0			
Age	39 (24–61)	/			
Risk factors					
Risk factor/s identified	35	70.0			
Intravenous drug user	30	60.0			
Sexual	6	12.0			
Alcohol	*	*			
Mental health	*	*			
Results	No	Percentage			
Negative result	59	63.4			
Awaiting result	5	4.9			
HCV PCR+	14	15.2			
HCV Ab+	31	33.7			
HCV PCR+andAb+	14	15.2			
Retest required	12	11.7			
Retest for test failure	6	5.8			
Retest for equivocal result	6	5.8			
Treatment	No	Percentage			
Clinical assessment completed	11	78.6			
Treatment initiated	8	57.1			
Treatment completed	*	*			
Uptake			95% CI		
Setting	Eligible	Screened	Uptake	Lower CI	Upper CI
Setting 1	34	34	100.0%	100.0%	100.0%
Setting 2	45	27	60.0%	41.5%	78.5%
Setting 3	25	20	80.0%	62.5%	97.5%
Setting 4	12	8	66.7%	34.0%	99.3%
Setting 5	*	*	*	*	*
Setting 6	*	*	*	*	*
Setting 7	*	*	*	*	*
Other settings	*	*	*	*	*
Total	137	103	75.2%	66.8%	83.5%
Coverage				95% CI	
Setting	Eligible	Result	Coverage	Lower CI	Upper CI
Setting 1	34	33	100.0%	100.0%	100.0%
Setting 2	45	24	53.3%	33.4%	73.3%
Setting 3	25	19	76.0%	56.8%	95.2%
Setting 4	12	*	*	*	*
Setting 5	*	*	*	*	*
Setting 6	*	*	*	*	*

* denoting value <5.
HCV, hepatitis C virus.

fibrosan performed. Cases were then commenced on direct acting antivirals. DBST was repeated on completion of treatment and at 3

months to ensure attainment of sustained virological response. To remove barriers, healthcare link workers could accompany patients

to appointments and could dispense medications daily at accommodation sites if required.

Across 8 settings, 103 people were screened (75.2% of total population). Results were obtained for 92 (89.4%), with 11 awaiting results or repeat tests. Fifty-nine (63.4%) screened negative for HCV antibodies. Thirty-one (33.7%) screened positive for HCV antibodies; of these, 14 (15.2%) were HCV RNA positive, indicating chronic infection. Eleven patients (78.6%) have been assessed in clinic, and 8 patients (57.1%) have begun antiviral treatment. The remainder are awaiting assessment or for treatment to commence (see [table 1](#)).

At time of writing, all patients diagnosed with HCV infection have been engaged for assessment and treatment. This, and high uptake, represent ongoing engagement with the programme and demonstrates the effectiveness of the model.

Our results demonstrate that community-based programmes are an effective way to identify and treat HCV infection in homeless populations. This approach was enabled by the provision of emergency accommodation due to the COVID-19 pandemic, which provided population stability, reducing barriers to treatment. Additionally, healthcare link workers simplified the screening and treatment process and provided flexibility for patients, giving them control over their health and encouraging them to engage with services.

Going forward, opportunities to provide stable accommodation and to engage patients when they are less geographically mobile should be actively sought. As 'lockdowns' continue internationally, there may be scope for local healthcare teams to replicate this work in their community as the global effort to eliminate HCV continues.

ABOUT

Arc works across Taunton, West Somerset and Sedgemoor, to house, support and enable homeless

people to maximise their potential. They strive for all homeless people to have a safe and supportive environment, where people can be inspired and empowered by their own strengths. ARC inspires healthcare link workers delivered the screening programme within accommodation settings run or supported by the organisation (www.arcinspire.co.uk).

Somerset National Health Service Foundation Trust provides community, mental health and acute hospital services in Somerset, England. Hepatitis nurse specialists, based at Musgrove Park Hospital, provided oversight of the screening programme, clinical assessment and treatment for cases (www.somersetft.nhs.uk).

Somerset County Council's Public Health team work across the county to reduce health inequalities and increase life expectancy. They work through a wide range of targeted public health programmes to promote better health. The team provided support for the screening programme and liaised with wider stakeholders to develop care pathways (www.somerset.gov.uk/social-care-and-health/public-health).

Katharine Hutchison ¹, **Anna Page**,¹ **Samuel Hayward**²

¹Gastrointestinal and Liver Services, Somerset NHS Foundation Trust, Taunton, UK

²Public Health, North Somerset Council, Clevedon, UK

Correspondence to Dr Katharine Hutchison, Gastroenterology, Musgrove Park Hospital, Taunton TA1 5DA, UK; katharine.hutchison@nhs.net

Acknowledgements Louise Jackson, Healthcare link worker, Arc inspire.

Contributors KH contributed to the design of study protocol, literature review and was the main author of the manuscript. AP contributed to the design of the study protocol, intervention design and delivery, data collection and collation. SH contributed to the design of the study protocol, literature review, analysis of results and provided project coordination. All authors approved the final version to be published.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; internally peer reviewed.

This article is made freely available for personal use in accordance with BMJ's website terms and conditions for the duration of the covid-19 pandemic or until otherwise determined by BMJ. You may download and print the article for any lawful, non-commercial purpose (including text and data mining) provided that all copyright notices and trade marks are retained.

© Author(s) (or their employer(s)) 2022. No commercial re-use. See rights and permissions. Published by BMJ.



To cite Hutchison K, Page A, Hayward S. *Frontline Gastroenterology* 2022;**13**:359–360.

Received 26 July 2021

Accepted 25 August 2021

Published Online First 8 September 2021

Frontline Gastroenterology 2022;**13**:359–360.
doi:10.1136/flgastro-2021-101979

ORCID iD

Katharine Hutchison <http://orcid.org/0000-0003-4102-4474>

REFERENCES

- Blach S, Kondili LA, Aghemo A, *et al*. Impact of COVID-19 on global HCV elimination efforts. *J Hepatol* 2021;**74**:31–6.
- Papatheodoridis GV, Hatzakis A, Cholongitas E, *et al*. Hepatitis C: the beginning of the end-key elements for successful European and national strategies to eliminate HCV in Europe. *J Viral Hepat* 2018;**25**:6–17.
- Public Health England. Hepatitis C in England 2020. The publications, 2020. Available: <https://www.gov.uk/government/publications/hepatitis-c-in-the-uk> [Accessed 15 Oct 2020].
- Lambert JS, Murtagh R, Menezes D, *et al*. 'HepCheck Dublin': an intensified hepatitis C screening programme in a homeless population demonstrates the need for alternative models of care. *BMC Infect Dis* 2019;**19**.