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Brokering Innovation Through Evidence

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Improving the identification, testing and treatment of Hepatitis C virus in primary care

Hepatitis C virus (HCV) infection, predominantly transmitted by exposure to blood, can infect the liver. If it's left untreated over many years it can cause serious and potentially life-threatening liver damage.

Around 143,000 people in the UK have chronic HCV infection. HCV can now be cured in over 90 percent of people with new, easy to take medicines.

However, as symptoms do not appear for several years, less than half of people infected are aware they have HCV and many people have not yet been treated, increasing the risk of liver damage and passing the virus to others.

The National Institute for Health and Care Excellence in England recommends that GPs should increase testing and treatment, especially among people with a history of injecting drugs, which is the largest risk group in the UK. However, robust evidence of effective interventions is lacking and, historically, testing and treatment rates in many sites have been low.

What was the aim of the project?

The Hepatitis C Assessment to Treatment Trial (HepCATT) assessed whether a multi-part intervention in 22 GP practices could increase testing, diagnosis and treatment of HCV-infected patients compared to usual care in 23 control practices, over one year.

The research was a collaboration between the National Institute for Health Research (NIHR) Applied Research Collaboration (ARC West) at University Hospitals Bristol NHS Foundation Trust and the NIHR Health Protection Research Unit at the University of Bristol.

What did we do?

The HepCATT intervention included (i) an electronic algorithm to flag patients with HCV risk markers and invite them for an HCV test by letter, or opportunistically through pop-up messages on GP computers when patients attended the practice (ii) staff HCV educational training, and (ii) HCV posters and leaflets in waiting rooms to increase patient awareness.

What we found & what this means

Around five percent of all patients were flagged with HCV risk markers.16 percent of the flagged patients were tested for HCV in HepCATT intervention GP practices compared to 10 percent in control GP practices. This was a 59 percent increase after adjusting for the characteristics of different practices.

When it came to accessing treatment, five times as many patients were assessed for treatment in the HepCATT intervention practices, compared to the control practices. Overall, the intervention was shown to be highly cost-effective.

GPs valued the algorithm which provided a list of patients with HCV infection risk factors that they may not already know about, to target for testing. They also appreciated the opportunity to discuss testing with patients, especially those who may not have been aware of the HCV risk. The training enhanced GPs' HCV awareness and knowledge of risk factors, which itself acted as a prompt for opportunistic testing.

When considering further roll out of the intervention, GPs suggested refining the algorithm to weight risk factors, fully integrating pop-up software with electronic patient record systems and additional resources to screen lists and support HCV testing.

What next?

The HepCATT intervention was found to be effective in increasing identification and treatment of HCV-infected patients, acceptable to staff and highly cost-effective for the NHS. Recommendations have been made to optimise and roll out the intervention across the UK to help improve the early diagnosis and treatment of patients with HCV infection, and prevent HCV-related illness.

Read the papers

Cost effectiveness of an intervention to increase uptake of hepatitis C virus testing and treatment (HepCATT): cluster randomised controlled trial in primary care.
Kirsty Roberts, John Macleod, Chris Metcalfe, Will Hollingworth, Jack Williams, Peter Muir, Peter Vickerman, Clare Clement, Fiona Gordon, William Irving, Cherry-Ann Waldron, Paul North, Philippa Moore, Ruth Simmons, Alec Miners, Jeremy Horwood, Matthew Hickman.

Published in the BMJ bit.ly/HepCATT

Increasing uptake of Hepatitis C virus infection case-finding, testing and treatment in primary care: HepCATT qualitative evaluation.
Jeremy Horwood, Clare Clement, Kirsty Roberts, Cherry-Ann Waldron, William Irving, John Macleod, Matthew Hickman.

Published in the British Journal of General Practice bit.ly/HepCATT-evaluation

Find out more

arc-w.nihr.ac.uk/HepCATT

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