THE COST EFFECTIVENESS OF COMMUNITY PHARMACY DRY BLOOD SPOT SCREENING FOR HEPATITIS C IN A RURAL POPULATION OF PEOPLE WHO INJECT DRUGS

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Background:
Hepatitis C (HCV) causes liver cirrhosis and hepatocellular carcinoma and alongside Hepatitis B it is a leading cause of mortality worldwide. New antiviral drugs with high efficacy mean the virus could be eliminated but to reach this objective in the UK it is necessary to identify undiagnosed cases of HCV. New therapies are expensive and therefore additional costs of screening should be considered when judging the overall cost-effectiveness of an intervention.

This study describes the cost-effectiveness a community pharmacy screening initiative for HCV in a rural population of people who inject drugs (PWID) on the Isle of Wight (IOW), UK.

Methods:
Two years of retrospective HCV testing and treatment data from the study population was entered into a validated Markov model. Quality of life scores and the real-world costs of screening and treatment were then used to calculate an incremental cost effectiveness (ICER) ratio.

Results
In 24 months 186 tests were conducted in 20 community pharmacies on the IOW. Of these 68 disclosed a history of injecting drug use. The majority were male (75%) and 10 (26%) were HCV RNA positive. 4 patients were genotype 3, 5 were genotype 1a and 1 was genotype 2. After 24 months 3 had received treatment and achieved a sustained virological response and one was on treatment. The cost of the screening, including pharmacist training, pharmacist time, dry blood spot tests and laboratory analysis was £70.75 per test. When combined with treatment and monitoring costs the ICER of the initiative was £7,739 per QUALY gained. This is well below the cost-effectiveness threshold of £20,000-£30,000.

Conclusion
Screening PWID for HCV in community pharmacies was feasible and cost-effective in this population. Better engagement with treatment and screening in larger urban areas with a higher background prevalence of HCV is likely to improve cost-effectiveness.

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