

THE IMPACT AND COST-EFFECTIVENESS OF SCALING UP HCV TREATMENT FOR ACHIEVING ELIMINATION AMONG PEOPLE WHO INJECT DRUGS IN ENGLAND

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Background:

England aims to reach the World Health Organisation (WHO) elimination goal of decreasing HCV incidence among people who inject drugs (PWID) to <2 per 100 person-years by 2030. We assessed whether existing strategies will be sufficient to achieve this and cost-effective.

Methods:

A dynamic HCV transmission model among PWID projected the impact of existing HCV testing and treatment services in four England regions. The model included the pathway from testing to treatment in prisons, drug treatment centres (DTC), and other settings; utilising empirical data on the scale-up in treatment. Cost data was collated through interview with practitioners and the published literature. The mean incremental cost-effectiveness ratio (ICER) was compared (counterfactual of no HCV treatment scale-up after 2015) to a willingness-to-pay ratio of £20,000 per quality adjusted life year (QALY) using a time horizon of 50 years (scale-up maintained), 3.5% annual discount rate, and treatment cost of £10,000 per person.

Results:

Continuing the existing level of testing and treatment is projected to decrease HCV incidence by 71.4-92.9% over 2015-2030 (range of medians) to 0.7-4.3 per 100 person-years. Uncertainty around these projections suggest there is <30% probability of achieving WHO target in three regions, and 95% probability in the fourth region. To achieve the target by 2030 (>60% probability) screening should be increased in DTC with 80% screened each year. The mean ICER of the existing scale-up over 2015-2065 ranged from £1258 to £1472 per QALY saved across the four regions with 350-701 HCV-related deaths averted. The mean ICER for increasing screening in DTC compared to current levels from 2024 was £2645 to £4808 per QALY.

Conclusion:

Our modelling suggests that further scale-up of testing in drug treatment centres is required to reach the WHO elimination HCV incidence target in England and is likely to be a cost-effective strategy.

Disclosure of Interest Statement:

None