

TESTING PERSONS IN PRISON FOR HEPATITIS C VIRUS: A SERVICE IMPROVEMENT PROJECT IN TAYSIDE, SCOTLAND

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Background:

Individuals in prison are at risk of acquiring hepatitis c virus (HCV). A service improvement project was implemented from December 2019–February 2021 integrating point-of-care (PoC) HCV RNA testing alongside conventional testing in a medium security prison in Tayside, Scotland. This study reports the overall capacity impact and whether it shortens time from test to treatment initiation.

Methods:

A 4-module Cepheid GeneXpert was introduced using the HCV VL fingerstick assay alongside conventional testing. Routine data was collected for the evaluation period and, for reference, the twelve months prior. Descriptive statistics were used to assess testing rates. Time from test to treatment initiation between groups was analysed by Cox regression using SPSS 25 and adjusted for age, genotype, prior treatment, and receipt of opioid agonist therapy.

Results:

167 GeneXpert HCV tests were administered to 105 individuals. Test reasons spanned HCV care: routine testing predominated (61, 36.5%), followed by on-treatment monitoring (38, 22.8%). There was no difference in overall tests compared to the reference period ($U=78$, $p=.466$), but GeneXpert tests comprised 37% of all HCV tests in the evaluation period. Thirty-two individuals, tested conventionally, commenced treatment in the reference period (group 1). Twenty-four commenced in the evaluation period: 10 tested conventionally (group 2); 14 with GeneXpert (group 3). Median days from test to treatment was 31 (group 1); 31.5 (group 2); and 11 (group 3). In adjusted analyses, those in group 3 were likely to commence treatment sooner compared to group 1 (aHR 3.87 [95% CI=1.43-10.45], $p=.008$) and group 2 (aHR 4.23 [95% CI 1.43-12.46, $p=.009$]).

Conclusion:

On-site PoC HCV RNA was feasible and helped sustain HCV testing disrupted by COVID-19. PoC testing significantly shortened time from test to treatment initiation. Targeted PoC testing of remand populations, typically incarcerated for short periods, could maximise in-prison treatment prior to liberation.

Disclosure of Interest:

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