A public health evaluation of antenatal hepatitis C opt-out testing pilots in England

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INTRODUCTION

In England, prevalence of hepatitis C infection is low (0.11%).[1] Universal hepatitis C antenatal testing is not currently recommended alongside established infectious diseases screening in pregnancy due to limited evidence.[2] Targeted testing for women with known risk factors is recommended, but implementation is inconsistent.[3]

We evaluated the implementation, effectiveness and impact of opt-out antenatal hepatitis C testing pilots.

METHODS

Pilots

- Hepatitis C Operational Delivery Networks (ODNs) tested pregnant women for hepatitis C antibody (anti-HCV) unless they opted out (declined) using blood samples collected for routine infectious diseases screening.
- Anti-HCV+ samples were tested for hepatitis C RNA to identify current infection.

Evaluation

- Cross sectional, mixed methods evaluation of five ODNs, spanning nine antenatal services in England, who delivered pilots over 1 to 2 years between April 2024 and March 2026 (Fig 1.).
- Descriptive analysis of outcome data on eligibility, uptake, hepatitis C positivity, characteristics of RNA + women (demographic, clinical, risk factors, contacts) were obtained from ODNs and surveillance datasets.
- Implementation data from site documents and stakeholder discussions were analysed thematically using the Normalisation Process Theory (NPT) framework.[4]

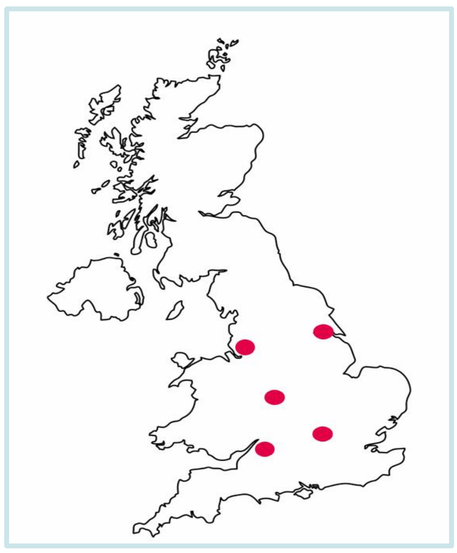

Figure 1. Location of evaluated pilot ODNs

RESULTS

Preliminary outcome findings

48,651 women eligible for hepatitis C testing

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45,921 women tested
94% of women eligible for testing

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199 women anti-HCV+
0.43% of women tested

↓

21 women HCV RNA+ (current hepatitis C infection)
→ 11% of anti-HCV+
→ **0.05% of all women tested**

→ **12 new diagnoses***
57% of HCV RNA+ women
→ **3 without known risk factors** (25% of newly diagnosed women)
→ **8 with prior pregnancies** (67% of newly diagnosed women)

*where known – diagnosis status unknown in 5 women

↓

18 women referred to specialist care
86% of HCV RNA+ women
→ 12 women commenced treatment (by the end of pilot)
(67% of women referred)

Figure 2. Antenatal hepatitis C screening pathway

Implementation findings

Do stakeholders understand the purpose and value of the pilot?	Recognition of HCV risk factors, pregnancy as an engagement opportunity, and the pilot's value for hepatitis C elimination.
Who drove the implementation of the pilot?	Effective multidisciplinary collaboration, staff engagement, and specialist training.
How was HCV testing implemented and embedded?	Clear communication of test results, streamlined pilot processes, and re-engagement of previously diagnosed complex hepatitis C patients.
How was the pilot evaluated and perceived over time?	Positive ODN experiences of the pilot, low prevalence of hepatitis C but perceived high value for individual patients, and funding constraints limit ongoing delivery.

Figure 3. Implementation of the pilot presented in the NPT framework

CONCLUSIONS

- Opt-out antenatal hepatitis C testing was feasible and acceptable to implement – a high percentage of women accepted testing and most subsequently diagnosed were linked to treatment within the timeframe of the pilot.
- **Prevalence of current hepatitis C infection in pregnant women is low (less than half that of the general population)[1] but universal screening could offer a more equitable and consistent approach.**
- Over half of women were newly diagnosed, including a proportion of individuals who would not have been tested based on risk-based screening guidance.
- Newly diagnosed women with prior pregnancies suggest missed opportunities for earlier diagnosis.
- ODNs reported pregnancy was an opportunity to engage women in hepatitis C testing and care, and the value of testing for hepatitis C elimination targets.[5]

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If you have any questions or would like to find out more about this pilot and the evaluation, please contact: evaluationepiscience@ukhsa.gov.uk