OPPORTUNITIES FOR EMERGENCY DEPARTMENT OPT-OUT TESTING FOR BLOOD-BORNE VIRUSES IN ENGLAND TO SUPPORT EARLIER DIAGNOSIS AND LINKAGE INTO CARE FOR PEOPLE LIVING WITH HCV

Authors: Simmons R [1], Cross E [1], Schoemig V [1], Clare T [1], Lester J [1], Andrews A [1], Mandal S [1], Mitchell H [1], Đuretić T [1], Desai M [1]

[1] United Kingdom Health Security Agency (UKHSA)

Background:
Opt-out blood-borne virus (BBV) testing in emergency departments (ED) enables diagnosis and linkage to care. A public health evaluation of the first 33-months of opt-out HIV, hepatitis B (HBV) and C (HCV) virus testing among people undergoing routine blood tests in 34 EDs in England compared people newly diagnosed with HCV (RNA/antigen) with other settings.

Methods:
Data sources: National Emergency Care Data Set (ECDS) for attendances and blood testing (21 EDs); Sentinel Surveillance of Blood-Borne Virus (SSBBV) for test positivity (24 EDs) matched to HIV surveillance for confirmatory results and linkage to care; and HCV treatment database for linkage to HCV care.

Results:
69% eligible were tested. People tested were older, and a greater proportion were from other ethnicities compared with other settings.

Of 1,408,550 tested (24 ED), BBV positivity was 1.2% (HIV:0.63%, HCV:0.15%, HBV:0.8%), with 31% newly diagnosed (HIV:8.3%, HCV and HBV:52%), number needed to test (NNT) identifying one new diagnosis was 240:HBV, 1,276:HCV, 1,916:HIV.

People newly diagnosed HCV positive (831;52%) were older (median age 53 vs 43), a higher proportion were women (36.6% vs 24.8%) and living in more deprived areas (35.8% vs 26.5%) compared to other settings. Fewer reported social risks (25% vs. 68%) and most had never injected. 22.8% were born in a high or intermediate prevalence country- an indication for testing in national guidance.

80% newly diagnosed with HCV were linked to care and 82% previously diagnosed were re-engaged. For HIV this was 97% and 94% respectively. No data was available for HBV.

Conclusion:
ED opt-out testing delivered BBV testing at scale identifying people with previously undiagnosed infections, particularly HBV and HCV. However, ED forms a small proportion of HCV treatment referrals and should be considered as part of combination testing approaches with lower NNT in drug services (37) and prisons (64).

Disclosure of Interest Statement:
The National Health Service (NHS) England funded this evaluation

AI declaration: *AI has not been used in any parts of the work contributing towards this submission*