A DECADE OF DRIED BLOOD SPOT TESTING FOR BLOOD BORNE VIRUS AND SEXUAL HEALTH SCREENING IN WALES; HOW CAPILLARY BLOOD HAS REVOLUNTIONISED SCREENING

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Background:

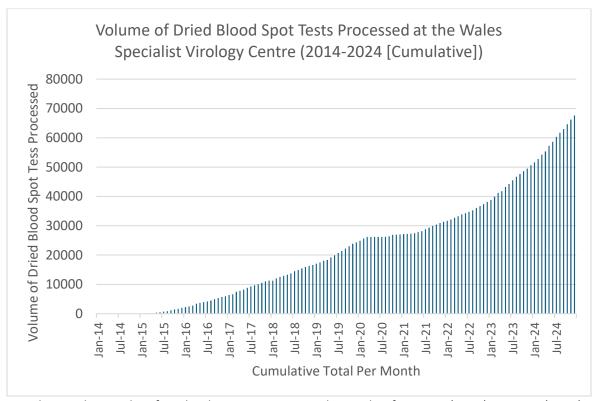
To achieve viral hepatitis and HIV elimination, testing needs to be accessible, scaleable and deliverable at the point of need. In Wales, capillary blood collection using Dried Blood Spot Test (DBST) cards, implemented a decade ago; has massively increased Blood Borne Virus (BBV) and Sexual Health (SH) testing in community-settings. Recently DBST has been automated and also combined with blood collection into microcapillary blood tubes to facilitate rapid Hepatitis C (HCV)-Antibody and HCV-Antigen testing (best of both worlds) as part of the National Point of Care Testing (POCT) program.

Description of model of care/intervention/program:

Barriers of venepuncture include feasibility, training requirements and transportation issues. DBSTs are a minimally invasive collection tool for HCV, Hepatitis B (HBV), HIV and Syphilis Screening by non-phlebotomy, non-healthcare trained staff in non-clinical environments via a simple finger-prick. Use in Wales has increased annually, accelerated by the introduction of the National POCT program. All Welsh prisons routinely use DBST, with the majority being performed alongside POCT. There is validation currently underway for DBSTs to be used for under eighteens to further expand its use.

Effectiveness:

The graph below shows annual increases in the number of people tested via DBST, except during COVID-19 pandemic years where testing numbers plateaued.



Not shown, the uptake of Cepheid GeneXpert testing has rocket from 190 (2020) to 1,000 (2024).

Conclusion and next steps:

There are a limited number of countries using DBSTs; even fewer using microcapillary tubes. The combination of these two tests gives the opportunity to screen for HCV, HBV, Syphilis and HIV, whilst also enabling rapid HCV testing and allowing same day diagnosis and treatment. Highlighting the success and popularity of DBST use in Wales will hopefully inspire other countries to implement this screening to assist in the WHO's elimination goals. The presentation will include practical information on DBST and microcapillary testing including use of automation.