



Opt-out Blood Borne Virus (BBV) testing in Emergency Medicine (EM) in a low prevalence setting



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Background

Grampian has a low prevalence of HIV, however has challenges with late diagnosis and missed opportunities for testing, in addition to an increase in diagnoses since 2022. With the success of NHS England’s opt out BBV testing programme, a Scottish Government funded pilot was performed to assess this intervention in a low prevalence setting¹. This assessed operational feasibility, testing uptake, new diagnoses and/or cases relinked to care and number needed to test, in addition to staff acceptability and system impact.

Methods

The pilot was performed from 15/1/24-15/5/24, funded for 4500 test bundles. IT processes were updated to allow EM opt test bundle for HIV, Hepatitis B (HBV) and C (HCV). All adult patients attending EM having phlebotomy were offered testing. Public and staff communications were circulated prior to and during the pilot. Positive results were actioned by BBV teams.

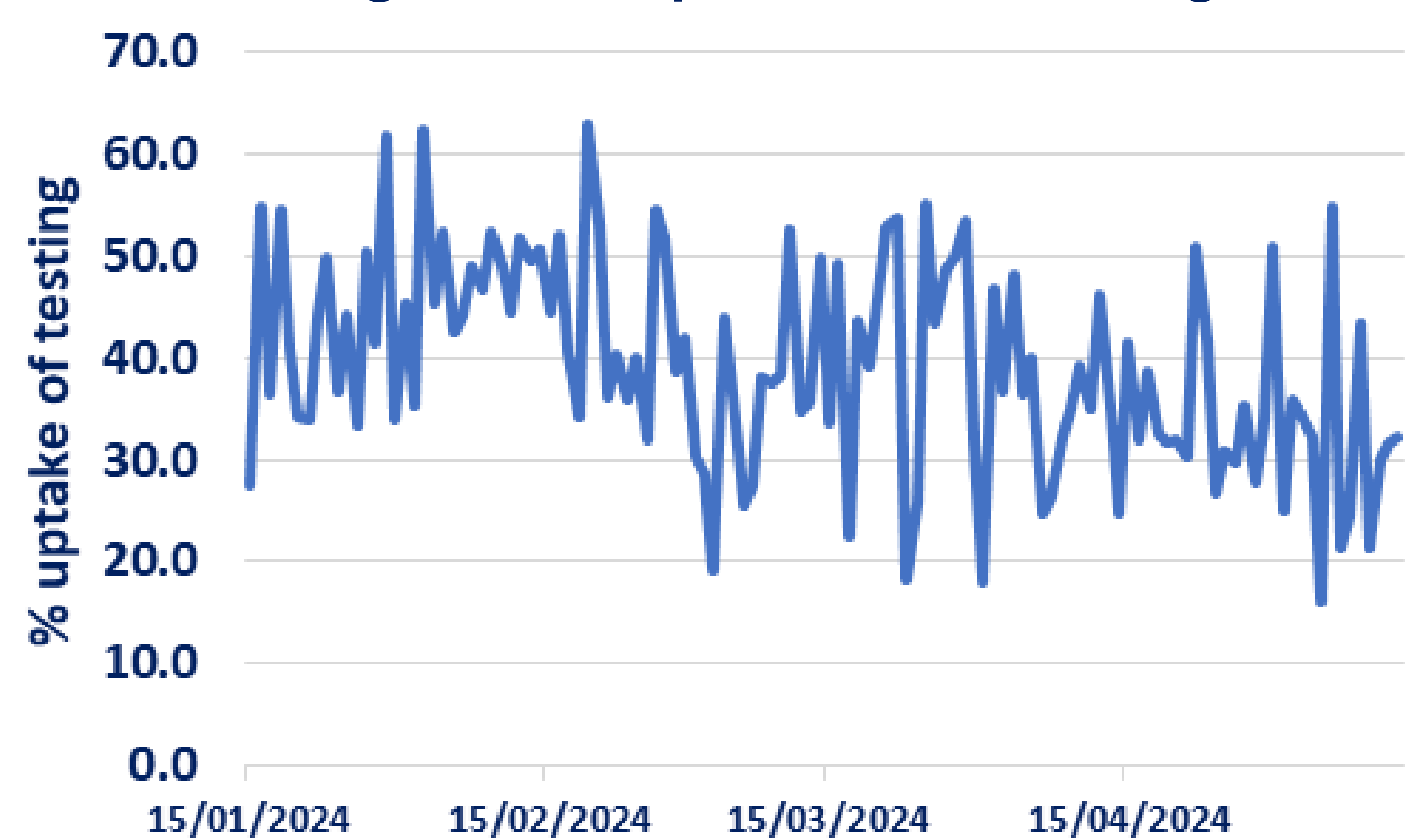
Testing uptake was measured against haematology results as a surrogate marker via laboratory IT systems. New diagnoses, re-linked to care cases and clinical outcomes were reported by BBV teams. This was compared to a ready reckoner of predicted case numbers in low prevalence areas².

Staff qualitative interviews were performed followed by thematic analysis.

Results

4602 test bundles were performed. Mean testing uptake was 40% (figure 1).

Figure 1: % Uptake of BBV testing



BBV test results, clinical outcome and actual vs expected number need to test to diagnose a new case or relink to care are shown in table 1.

References

- Emergency department opt out testing for HIV, hepatitis B and hepatitis C: The first 100 days. NHS England, 2022. [NHS England » Emergency department opt out testing for HIV, hepatitis B and hepatitis C: The first 100 days](#)
- Hill-Tout R et al. ED testing- challenges and lessons of a combined BBV approach. BHIVA Spring Conference, 2024
- Hutchison S. Scottish BBV seroprevalence ready reckoner. Personal communication, 2024.

Table 1: BBV test results, clinical outcome and number needed to test (*<5)

	New diagnosis	Previously diagnosed and not in care	Clinical outcome	Number to test per case undiagnosed/ not in care	Expected number to test from ready reckoner
HIV	0	*	Re-linked to care-*	4602	6000
HBV	9	0	Linked to care -8 Not engaged * Treatment commenced - 5	511	625
HCV	14	0	Linked to care-7 Not engaged- 6 Treated- 5	329	417

Themes from staff qualitative interviews assessing acceptability and system impact include,

- High acceptance from EM staff who felt “proud” to be part of BBV diagnosis process
- Minimal impact to EM workload
- Felt this was opportunity to test people who may not access testing elsewhere
- Offer/uptake impacted by EM activity and timing of pilot during busy winter period
- Extended pilot was suggested to increase offer/uptake
- Costs higher than predicted especially for laboratory processes
- More time for public and staff communications and EM staff training

Conclusions

Despite short timeframe, this pilot shows EM opt-out BBV testing is feasible in a low prevalence area with lower numbers need to test than expected. Further pilots would increase evidence base and determine cost effectiveness, especially with continued late diagnoses and missed opportunities, with associated healthcare costs, morbidity and mortality.



All patients who have a blood test performed as part of their assessment in the Emergency Department will now have a test for Hepatitis B, C and HIV.

All results are confidential and any patient requiring further testing or follow-up will be contacted directly by an appropriate specialist.

If you do not wish to be tested, please let the member of staff performing your blood test know. Early diagnosis is important, treatment may be life saving and is free on the NHS.

(This Scottish Government initiative will be active from 15th January to 15th April 2024).

