

Universal Point of Care HIV testing in the Emergency Department (ED); a single center pilot trial

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Background:

Opt-out HIV screening in EDs is an effective method for identifying people with HIV who are unaware of their status. But there are concerns regarding follow-up of results and practical constraints within the ED.

This trial was performed to determine the utility and acceptability of universal point of care (POC) HIV testing in the ED.

Methods:

A 4 week (2/6/2025 - 29/6/2025) single centre pilot study was performed. All adult patients who attended the Austin ED were offered HIV testing using a POC device (the AtomoRapid®).

Patients were approached by a study nurse who gained verbal consent and performed testing. Reason for declining was collected. Simple demographics (age, gender, language spoken and if patient had been tested for HIV before) was recorded. Participants were informed of result immediately, any positive result was followed by formal serological testing.

The primary outcome was incident HIV. Secondary outcomes included: number who opted-out and reasons given, false positive results and the impact of the false positives, costs.

Results:

3,129 people were approached; 1,816 (58%) consented to testing (mean age 60 [SD 21], 49% female).

Reasons for refusal; 26.5% felt too unwell, 15% did not want any more tests, 20% believed they were low risk, 20% recently been tested. 50 participants were talked

out of testing by their families. Six were known to be living with HIV. 8% spoke English as a second language.

There were two positive results, one a false positive and one a previously known person with HIV who had been lost to care.

It cost ~\$45.38 (nursing and POC purchase costs) per test.

Conclusion:

HIV testing in the ED is well accepted but in-person consent model is laborious and costly limiting its applicability to a broader roll out. Alternate opt-out methods of testing are required.

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