HIV Point of Care Testing in the Emergency Department

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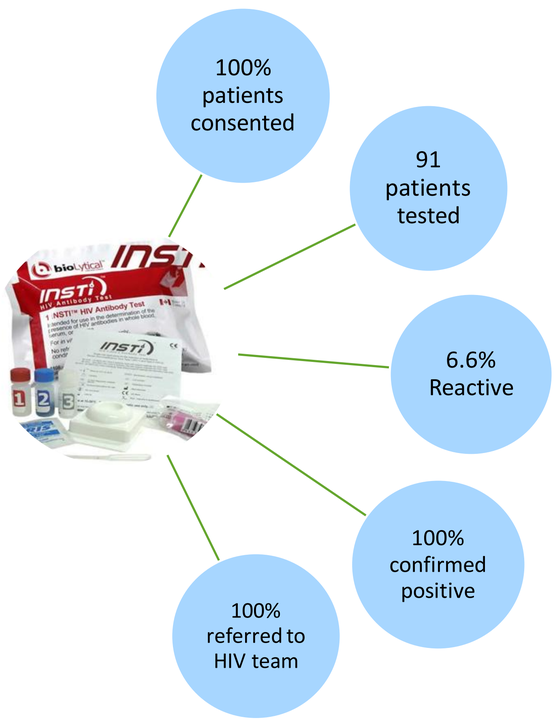
SUMMARY



METHODOLOGY

- HIV Test Facilitator based in the ED during normal working hours, Monday to Friday, for one year – responsibilities include proactive identification of patients with clinical indicators of HIV, pre and post test discussion, performing POCT, performing confirmatory serology if POCT reactive, linking positive patients into care, educating ED staff
- Staff education around clinical indicators of HIV, benefits of diagnosis, how to discuss HIV with patients, how to access HIV POCT
- Development of clinical guidelines and care pathways.
- Patients with reactive POCT result have confirmation antibody test done immediately and referred to HIV team for follow up
- Data collection includes patient demographics, reason for test, whether test accepted or declined, dates of follow up if positive
- Impact on ED and staff engagement with testing initiative monitored

DISCUSSION & CONCLUSIONS

Targeted HIV POCT in the ED at Newham has had limited success. Although the pick-up rate is high, the number tested is low despite the proactive approach to testing employed. It is possible that offering testing outside normal working hours would identify more patients in need of a test, but this would be a more expensive service to run.

Although clinical staff in the ED welcomed the service it is clear that it is not possible to embed POCT testing into routine practice. Every minute counts in a busy ED and clinicians are focussed on treating presenting problems rather than identifying underlying diagnoses.

All patients who tested positive needed admission, and probably would have been diagnosed during their admission. A diagnosis in the ED allowed immediate specialist intervention in their care, which probably reduced morbidity and length of stay and possibly reduced mortality. The same result could have been achieved by suspicion of HIV triggering urgent review and POCT by the specialist team.

Although HIV POCT can be invaluable in some situations, it does not seem possible to embed this into routine practice in the ED. At Newham we are exploring the idea of adding HIV serology to routine bloods taken for patients with clinical indicators of HIV, with a robust system to check results and follow up patients who test positive.

Results of a screening programme using HIV serology in the Medical Admissions Unit of the Royal London Hospital are awaited.

INTRODUCTION

In areas of high HIV prevalence and with high rates of late diagnosis, the Emergency Department (ED) is a potentially important venue for HIV testing.

Many people diagnosed late have had preceding contact with health professionals for symptoms related to poor immune function, representing missed opportunities to diagnose them sooner.[1,2]

The London borough of Newham has a HIV prevalence of 8.6 per 1000[3]. Thirty-eight percent of Newham residents are diagnosed with a CD4 count of less than 200.[4] There is a clear need to expand HIV testing in Newham.

Because the turnaround time for a standard HIV antibody test is several days, it is logistically difficult for ED staff to test a patient for HIV even if the diagnosis is suspected. Many patients who are advised to seek an HIV test elsewhere do not do so until they develop an AIDS diagnosis.

An HIV Point Of Care Test (POCT) which provides a result in 60 seconds should be the perfect solution, akin to a fingerprick test for blood sugar. Barriers to HIV POCT use include, concerns about effect on patient flow and the 4 hour wait target, clinicians' lack of confidence regarding HIV counselling and the cost of the HIV POCT kit.

The aim was to evaluate a one year pilot HIV POCT project. This is a joint project with ED and HIV services very much working together to develop clinical pathways and guidelines.

This programme has been supported with an educational grant via the Gilead UK and Ireland Fellowship Programme.

The ultimate aim of the testing project was to build capacity to make HIV POCT a routine part of care in the ED where clinically indicated.

RESULTS

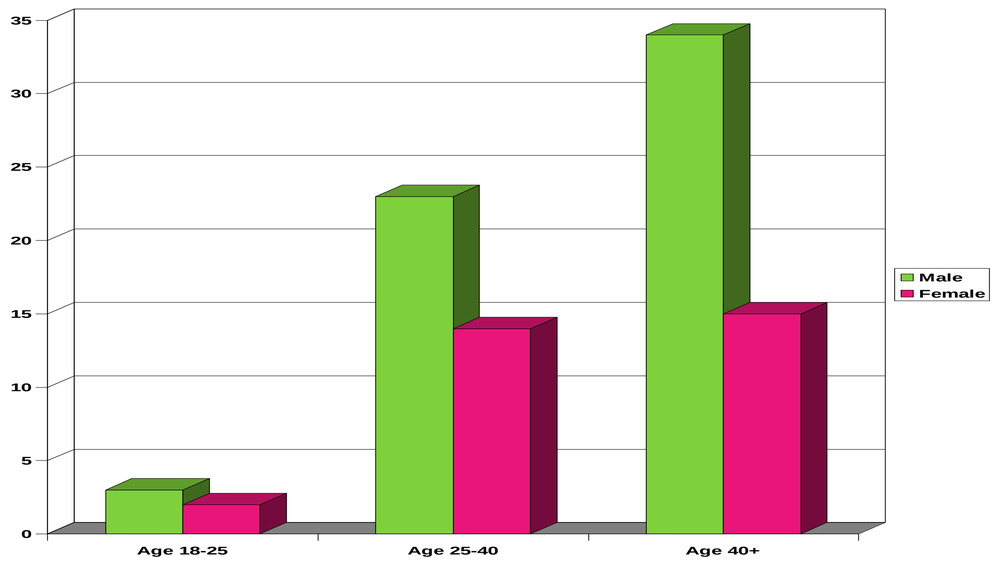
Testing started in late August 2011. The testing initiative has been well-received in the ED and has not affected the 4 hour wait target.

- Number of patients offered test = 91
- Number of patients accepting test = 91 (100%)
- Number of reactive tests = 6 (pick up rate 6.6%)
- Number of confirmed positives = 6 (100%)
- Number of positive patients accessing HIV care following diagnosis = 6 (100%)

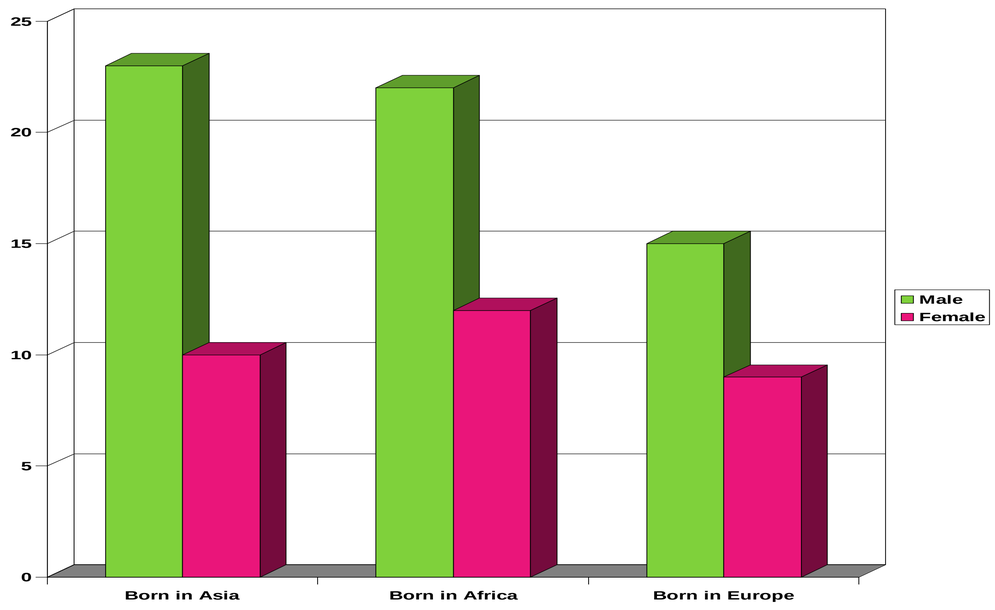
Clinical indicators for testing:

T.B (past or suspected), suspected *Pneumocystis* pneumonia (PCP), hepatitis, shingles, lymphadenopathy, thrush, suspected malaria, weight loss, diarrhoea, chest infection, vaginal abscess, unexplained rash, need for HIV Post Exposure Prophylaxis lifestyle factors(drug/alcohol abuse, homeless, previous incarceration)

Patients tested showing age and gender



Patients tested showing continent of origin and gender



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