

New diagnoses of HIV through multi-centre Emergency Department opt-out HIV testing

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Background

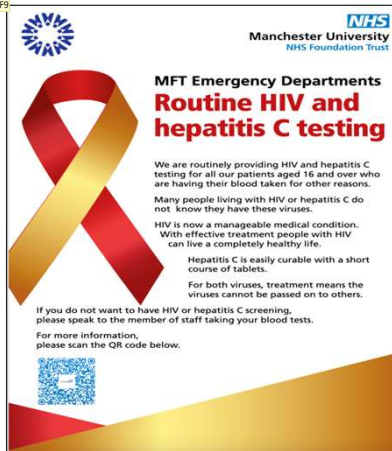
Emergency department (ED) opt-out HIV testing in high HIV prevalence areas in the United Kingdom is recommended in BHIVA¹ and NICE² guidance. Funding was made available for ED opt-out HIV testing in extremely high prevalence areas from the National HIV Action Plan³. This practice **normalises testing, reduces preventable morbidity and mortality** through early diagnosis and **contributes to ending HIV transmission**.

Manchester has an extremely high HIV prevalence (>5 per 1,000 population⁴) and opt-out testing for adults 16 years and over having bloods in ED has been rolled out stepwise across three Manchester University Foundation trust sites: Manchester Royal Infirmary, Wythenshawe Hospital and North Manchester General Hospital from December 2021, ongoing for 12, 7.5, 3 months per site respectively to date of ending data collection.

Methods

Opt-out HIV and hepatitis C testing are automatically requested on a routine full blood count in the ED.

Electronic records of individuals diagnosed with HIV through opt-out ED testing were analysed for 22.5 site-months from 1st December 2021 to 1st December 2022. Demographics, clinical presentation, HIV parameters and subsequent engagement with care data were reviewed.



Results

- **26 people with a new HIV diagnoses** were identified through the initiation of opt-out HIV testing in the EDs

Demographics (n=26)

- 77% male
- Median age 40 years (range 24-60 years)
- 31% were white British
- 62% had a Manchester postcode

5 individuals could not be contacted following their diagnosis

HIV risk factors (n=21)

- 48% were men who have sex with men
- 48% were born or previously lived in a country of high HIV prevalence.
- Other risk factors included:
 - Intravenous drug use and chemsex (n=2)
 - Partner living with HIV (n=1)
 - Previous blood transfusion outside of the UK (n=1)

Engagement in care

All contactable individuals (21) are engaged in care, taking antiretroviral therapy and have been offered valuable 3rd sector support including co-designed online information for those diagnosed via ED and ongoing support at the point of initial diagnoses.

Further diagnoses

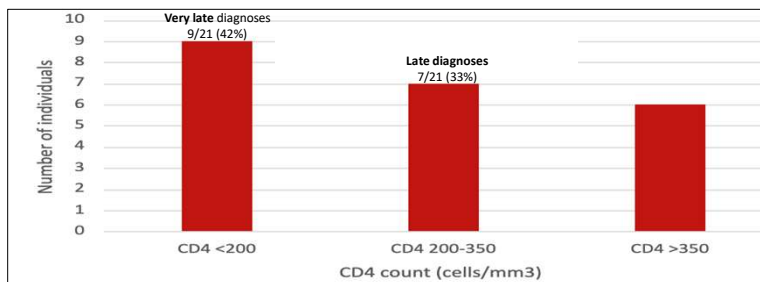
As of the 1st April 2023 there have been a further 11 new HIV diagnoses through ED opt-out testing

Clinical presentations (n=26)

1. AIDS-defining illnesses 12%
 - Including cryptococcal meningitis, *Pneumocystis jirovecii* pneumonia and HIV encephalopathy
2. Indicator conditions 15%
 - Including shingles and unexplained fever
3. Non-HIV related presentations 73%
 - Including assault, drug and alcohol intoxication and falls

46% individuals were either discharged from ED or left against medical advice

HIV parameters: CD4 count at diagnoses (n=21)



"I attended A&E for an unrelated reason. I did not see the posters in the waiting room or I feel I may have opted -out. I was initially angry about being tested ...but now I feel very grateful I have been diagnosed as I don't think it is something I would have tested for in the near future . Don't die of ignorance. Take control of your health and help to erase the stigma of HIV" - Newly diagnosed person living with HIV

Discussion

- Over 70% of individuals did not present with HIV-related conditions so would have left the hospital without being tested or diagnosed.
- 46% were discharged from the ED/left against medical advice emphasizing the importance of testing at presentation
- 42% and 33% of individuals presented 'very late' (CD4 <200) or 'late' (CD4 200-350) respectively and so are at risk of increased morbidity and mortality. Individuals diagnosed late have an 8-fold greater mortality within 1 year³.
- This data show that ED opt-out testing is likely to diagnose both individuals who are unlikely to be offered a test **and** those who are more at risk of significant morbidity and mortality from HIV.

Conclusions and future considerations

- Opt-out ED testing results in **earlier HIV diagnoses, prevention of HIV-associated morbidity and mortality and reduction in HIV transmission**.
- It also **reduces health inequalities** by establishing HIV status regardless of presentation or demographics.
- Additional successes of the programme have been:
 - **re-engagement - 18 individuals previously aware of their HIV diagnoses but lost to care, now engaged in care**
 - **Making new diagnoses of Hepatitis C infection**

Future considerations

- Ensure opt-out HIV testing available via all urgent care pathways (for example Same Day Care, Urgent Treatment Centre)

vHC(M0 To... date of ending data collection.
van Halsema Clare (ROA) MFT,
2022-02-11T22:22:57 828

vHC(M1 People with new diagnosis of HIV
van Halsema Clare (ROA) MFT,
2022-02-11T22:21:11.290

vHC(M2 Not quite equivalent - white British, and Black African? Or Caribbean? Could you give that info?
van Halsema Clare (ROA) MFT,
2022-02-11T22:26:26 151

MO(MUNF2 0 Agree with clare needs changing
McQuillan Orla (ROA)
Manchester

vHC(M3 AIDS_{3:32:53.339}
van Halsema Clare (ROA) MFT,
2022-02-11T22:26:11 090

vHC(M4 Just made this lower case
van Halsema Clare (ROA) MFT,
2022-02-11T22:27:05 997

vHC(M5 As of DATE
van Halsema Clare (ROA) MFT,
2022-02-11T22:27:16 812

vHC(M6 Perhaps add needs funding for expansion to high prevalence areas
van Halsema Clare (ROA) MFT,
2022-02-11T22:28:35.033

vHC(M7 Any positive/negative feedback from them about process of being diagnosed? Can we say anything about 3rd sector referrals?
van Halsema Clare (ROA) MFT,
2022-02-11T22:28:22 657

MO(MUNF8 I would phrase as 16 and over
McQuillan Orla (ROA)
Manchester

MO(MUNF9 Do we think the sexual assault is a risk factor ? I would probably remove
McQuillan Orla (ROA)
Manchester

MO(MUNF10 This isnt ging to happen I don't think so is not a realistic aim I would remove
McQuillan Orla (ROA)
Manchester

vHC(M11 These are .98 AIDS-defining so perhaps put under 1.

Slide 1 (Continued)

van Halsema Clare (ROA) MFT,
2023-03-15T23:16:55.144

vHC(M11 0 And could you
put a couple of indicator
conditions under 2?

van Halsema Clare (ROA) MFT,
2023-03-15T23:17:23.032