Higher late diagnosis among people diagnosed with HIV through accident & emergency department opt-out testing programs at Ealing, Brent, and Harrow boroughs of London

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**Background**

- Opt-out blood-borne virus (BBV) screening for HIV, Hepatitis B, and Hepatitis C virus was rolled out in our trust emergency department at Ealing and Northwick Park hospitals in May 2022.

**Diverse boroughs of London**

- Ealing, Brent, and Harrow have a very diverse population with a significant population of Asian ethnicity - 29.7%, 32.8%, and 45.2% respectively and Black ethnicity - 10.9%, 17.5%, and 10.2% respectively (Census 2021).

**Methods**

- We present our findings from our successfully running BBV screening program. Data from the BBV screening program was collected and all the new first diagnoses of HIV were analysed for demographics, CD4 count and co-infections.

**Results**

- A total of 37,965 blood-borne virus panel test for HIV, Hepatitis B & Hepatitis C were conducted in our trust Emergency department at Ealing and Northwick Park hospitals from May 2022 to November 2022.

- In September 2022, 95% and 75% of people who had a blood test in A&E were screened for BBV at Northwick Park and Ealing hospitals respectively, 182 positive HIV results, 283 Hepatitis B positive, and 276 Hepatitis C positive results were reported.

- A total of 12 new first diagnoses of HIV (Male 7, Female 5; Heterosexual 12; Ethnicity: White 3, Black 1, Asian 7, and another ethnicity 1; Outpatient 7, Inpatient 5) were identified among those tested positive for HIV.

- The median age was 36.5 years (Range: 25 to 67 years). 7 out of 12 were born abroad (India 3, Sri Lanka 1, Brazil 1, Eritrea 1, Kenya 1, Romania 1). All had stable housing and were residents of the UK.

- The median baseline CD4 count was 171 (Range: 12 to 718) cells/ul. Ten (83%) has CD4 count < 350 cells/ul and eight (66%) had baseline CD4 count <200 cells/ul.

- Seven (58%) had AIDS-defining conditions diagnosed after HIV-positive confirmation. None had active co-infection with Hepatitis B or Hepatitis C viruses.

- Nine (75%) were started on ART and Five (71%) achieved undetectable HIV viral load by the end of November 2022.

**Presenting symptoms to emergency department**

- Ear trauma, Cough, Acute Kidney Injury, Dysuria, Pyelonephritis, Ureteric colic, Upper GI bleeding, Diarrhoea, Epigastric pain, Appendicitis, Sickle cell crisis, Arthralgia were symptoms reported on presentation to A&E by newly diagnosed people.

**Conclusion**

- Opt-out BBV screening program for HIV testing in the emergency department was effective in identifying individuals living with HIV who were unaware of their diagnosis in our population where stigma due to HIV is the most common barrier to accessing sexual health services.

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