HIV Testing in an Infectious Diseases Unit: Can We Follow the Guidelines?

Background

As at December 2019, there were 5917 people diagnosed with HIV and an estimated 505 undiagnosed individuals living in Scotland [1]. Almost 1/3 of those diagnosed were resident in Glasgow. Increasing the uptake of testing has been identified as a priority area for HIV prevention to reduce the number of undiagnosed cases [2]. Healthcare professionals have a significant role to play in initiating the testing of at risk individuals [3, 4]. The median rate of Northern European hospital inpatients presenting with HIVassociated symptoms and being tested in 2015 was 44% [5].

Whilst adhering to the BHIVA/BASHH/BIA HIV national testing guidelines (last updated 2020 [6]), the Infectious Diseases (ID) department of the Queen Elizabeth University Hospital (QEUH) in Glasgow uses a local testing policy based on age and offers an HIV test to all inpatients aged 16-65.

Aim

The aim of this project was to assess rates of HIV testing within the ID department of the QEUH in relation to the:

- BHIVA/BASHH/BIA 2020 guideline
- Local NHS Greater Glasgow & Clyde policy.

Methods

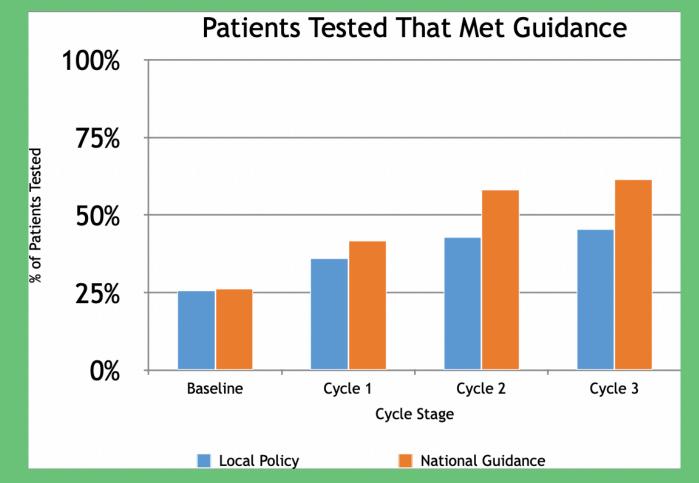
Findings

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Patient numbers for each cycle ranged from 31 to 46.

1. Patients Appropriately Tested According to National & Local Guidance:

The percentage of patients that were appropriately tested progressively increased following each intervention cycle.



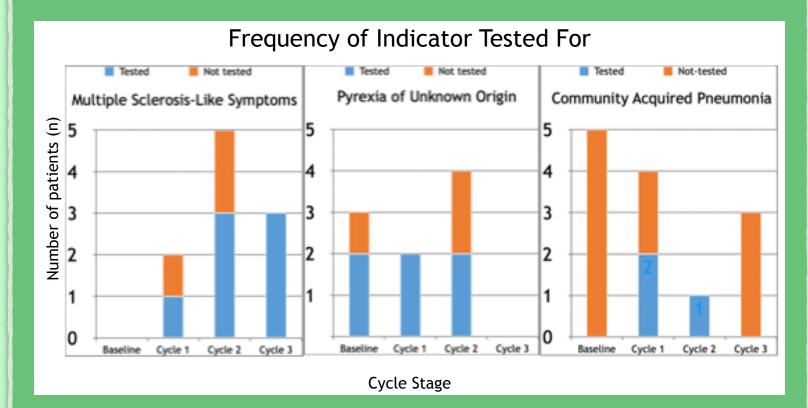
Local policy testing improved from 25.7% (baseline), 36.1% (cycle 1), 42.9% (cycle 2), 45.5% (cycle 3). National guidance increased from 26.3% (baseline), 41.7% (cycle 1), 58.3% (cycle 2), to the highest rate 61.5% (cycle 3).

2. Identification of Indicators and Testing Rates:

The population consisted of four distinct groups of all patients discharged from the ID department over four separate two-week periods. The first data set collected was used to establish a testing baseline; three subsequent data sets were then collected to review the effectiveness of a series of accumulated educational interventions. The educational interventions comprised:

- Ward-based posters (cycle 1)
- Poster and testing criteria information sheets given to medical staff (cycle 2)
- Poster, information sheet and presentation to doctors working in the ID unit (cycle 3).

The number of patients tested for HIV in each cycle was determined. The number of tested patients in each cycle was then presented as a percentage against the recommended rate (according to both national and local guidelines). This identified testing rates that were compared after each cycle. 28 indicator conditions (where HIV testing is recommended) are identified within the BHIVA/BASHH/BIA guidelines [6]. The most common indicator to test for was found to be the age of patient (only pertains to the local policy).



Other indicators that most frequently lead to testing included MS-like symptoms, pyrexia of unknown origin and community acquired pneumonia. The increase in testing rates was seen across the range of indicator conditions and patient groups.

Conclusions

The HIV testing rate compared to national guidelines was 61.5% from a baseline measurement of 26.3%. This is a significant increase from the median Northern European testing rate of 44%. Testing rates for HIV increased with each cycle, which indicates not only the importance of education, but also the delivery approach used and the value of message reinforcement. Improvements in testing rates were seen across indicator conditions and patient groups; age was the most common indicator leading to testing. It is recognised, however, that sample sizes were small and are therefore subject to considerable variation.

Although there are a range of factors and barriers that influence the uptake of HIV testing, healthcare providers frequently fail to make a diagnosis of HIV when patients present with indicator symptoms [7]. Testing rates are enhanced through the provision of healthcare worker education programmes outlining testing guidelines [8-10]. This small study found that adherence with national HIV testing guidelines can be significantly improved through the use of simple educational measures. Re-audit with a larger patient cohort would be of interest to monitor the effects of continued testing education. Wider HIV testing of at risk groups is important in HIV prevention to reduce undiagnosed cases and to ensure timely

treatment of those living with HIV.

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