HIV Service Effectiveness and Performance in University Hospital Limerick: Re-audit three years on

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Background

HIV is a complex chronic disease which requires high quality care with regular follow-up. An expert panel was convened by the National Committee for Quality Assurance (NCQA) in 2007 which drafted performance measures at the levels of individual patients and of systems. Seventeen measures were drafted in total.

An audit of the ambulatory HIV service at University Hospital Limerick (UHL) in 2016 showed good adherence rates with the NCQA HIV care quality measures and outlined the demographics of the patient cohort. This audit focuses on the period between March 1st 2019 and March 1st 2020. This period precedes the beginning of a national lockdown in response to the Covid-19 crisis which caused disruption to many outpatient services and should provide a comparable set of data for analysis alongside the 2016 audit.

Aims

Primary Aims

1. To compare the performance of the ambulatory HIV service at University Hospital Limerick to 12 published HIV care quality measures as outlined by the NCQA
2. To compare 12 of the defined measures against a 2016 audit of the same service

Secondary Aims

1. To examine the demographics of the ambulatory HIV care cohort at UHL
2. To determine incidence of co-infection with hepatitis B and hepatitis C in this population

Methods

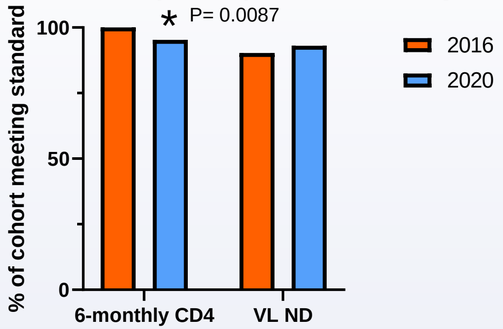
A retrospective review of HIV case records was performed. Inclusion criteria were clinic attendance at least once between March 1st 2019 and March 1st 2020 and retention in care. Retention in care was defined as at least one subsequent visit following the audit period. Data on 171 patients were entered into an Excel Spreadsheet and percentages calculated. P-values comparing proportions in each categorical variable were calculated using Chi-squared tests in Graphpad Prism 8.4.3. Significance (p=<0.05) indicated by asterisks (*).

Results

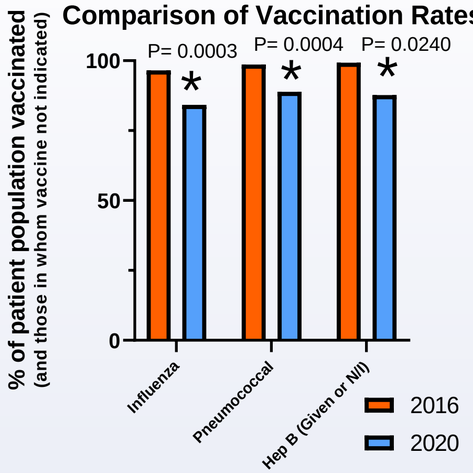
This patient group number increased by 18.8% from 144 to 171. Median age was 42 years (Range: 23 to 76). Median CD4 count was 668 cells/mm^3 (Range: 162 to 1871). Sex distribution was 35.7% female to 64.3% male. Results are displayed with asterisks indicating a significant difference between audits with accompanying p-values where significance seen.

VL ND = Viral Load Not Detected; Including <40/ml

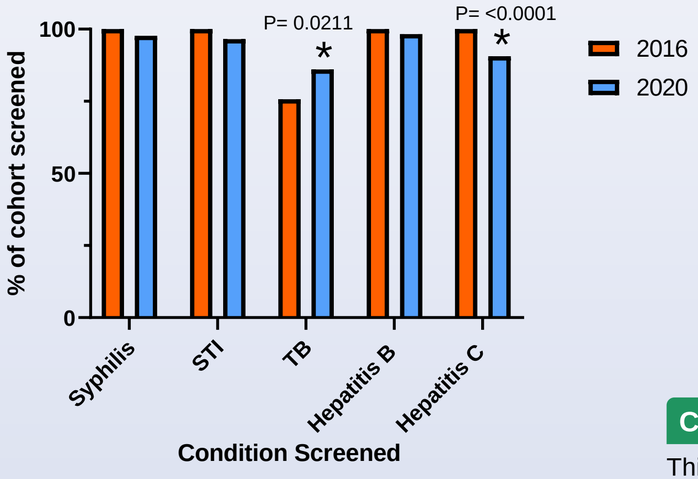
Comparison of HIV-specific parameter testing rates



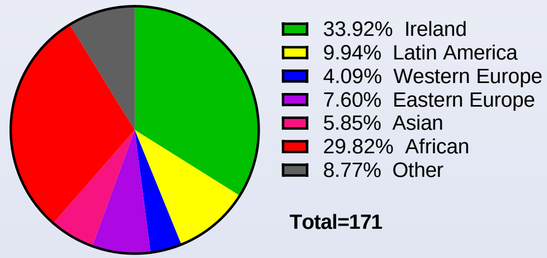
Comparison of Vaccination Rates



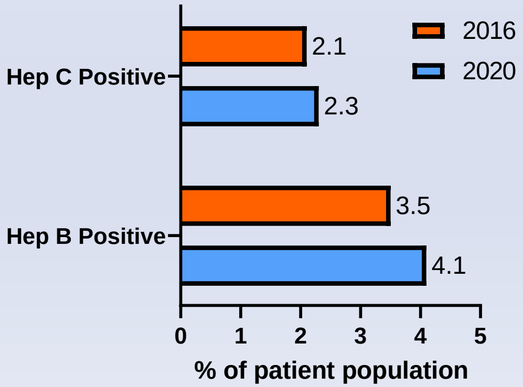
Comparison of co-infection screening rates



Global origin of patient cohort (2020)



Comparison of Hepatitis B & C Co-Infection



Conclusions

This service continues to show good adherence to international standards of HIV care. There are areas which can be improved upon including vaccination rates (influenza, pneumococcal & Hepatitis B), Hepatitis C screening and ensuring at least 6-monthly CD4 counts. TB screening rates have improved significantly. Further education to staff regarding opportunistic screening and vaccination should be carried out to further improve adherence.

References

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