

Introducing routine HIV testing to a gastroenterology ward: a junior doctor-led project

K. Kuriakose, K. Donald, N. Heyes, A. Dyson, K. White, A. Garner
Manchester University NHS Foundation Trust
Contact email: kevin.kuriakose@mft.nhs.uk

Background

With an HIV prevalence rate of 5.89 in 1,000 (aged 15-59) in 2021, Manchester is one of 19 local authorities in England with extremely high HIV seroprevalence.¹ BHIVA and NICE HIV testing guidelines recommend routine HIV screening for all hospital admissions in areas of high prevalence.^{2,3} Despite this, at the time of our project, few hospitals in Greater Manchester were offering routine HIV screening for hospital admissions.

Junior doctors are important players in improving patient care and are often well positioned to recognise gaps in service provision.⁴ Thus, junior doctor-led initiatives can promote a culture of HIV testing in areas where widespread screening is lacking.

SMART Aim

To test 50% of patients on the gastroenterology ward, Manchester Royal Infirmary for HIV by 5th March 2021.

Methods

An initial retrospective review of patient's electronic records was performed to estimate the baseline number of patients tested for HIV on the ward (May – September 2020).

The intervention stage of the QIP was comprised of three plan-do-study-act (PDSA) cycles over a 24-week period (September 2020 – March 2021). Data was collected on a weekly basis to determine: 1) the percentage of patients on the ward who were tested for HIV and, 2) the percentage who had a HIV test requested on the electronic pathology system.

PDSA 1

- 18/09/2020
- Ward team given a teaching session on HIV testing.

PDSA 2

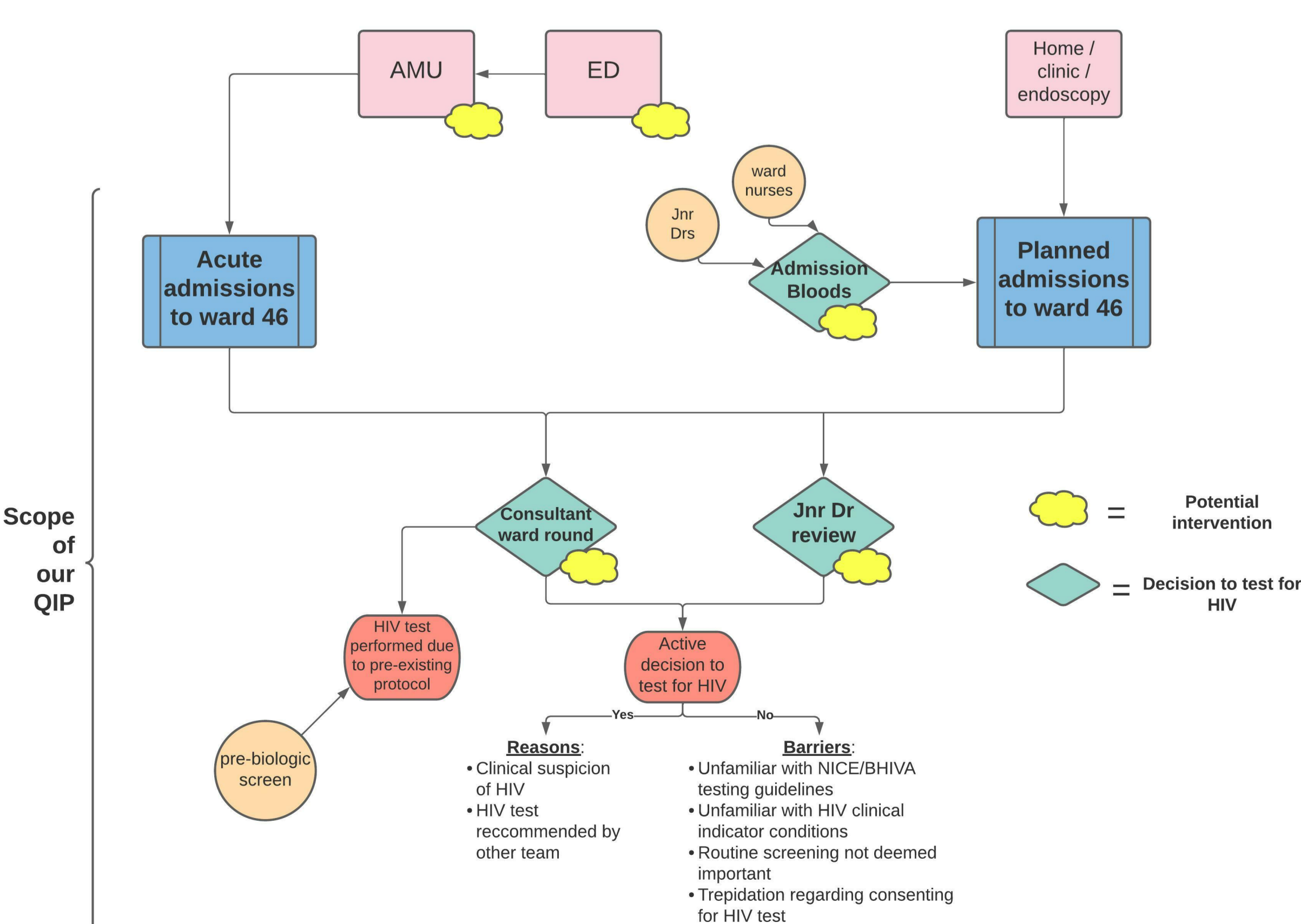
- 09/11/2020
- With the approval of the departmental lead, a new policy was introduced to offer HIV testing to all patients admitted to the ward.

PDSA 3

- 18/02/2021
- A junior doctor is nominated daily, at board round, to ensure that all patients are offered HIV screening.

Process Mapping

Figure 1 – process map of HIV testing on ward 46 (gastroenterology)



Results

The data is represented in a 'run chart' showing changes in rates of HIV testing over time. A baseline median (proportion of tests performed) has been calculated using preliminary data prior to intervention. A new median is calculated for each PDSA cycle. The data demonstrates a stepwise shift upwards in the baseline median with each intervention. Each successive intervention appears to be more successful than the last, demonstrating increasingly larger shifts in the baseline median.

However, looking at the individual data points, rather than the baseline median, there are clearly large fluctuations in the percentage of patients tested for HIV on a weekly basis. Notably, there was an initial increase in the number of tests performed at the start of each PDSA cycle with subsequent reduction as the weeks progressed.

PDSA cycles 1, 2 and 3 resulted in a shift in the median percentage of patients tested for HIV from a baseline of 7.7% up to 11.1%, 19.2%, and 38.5% for each respective cycle (see figure 2). At its peak, 63% of patients were tested for HIV.

In the intervention period of 24 weeks, the 50% target rate of testing was achieved in the last week of the project. Additionally, one patient was diagnosed with HIV on the basis of this QIP for whom there was otherwise no clinical suspicion of HIV.

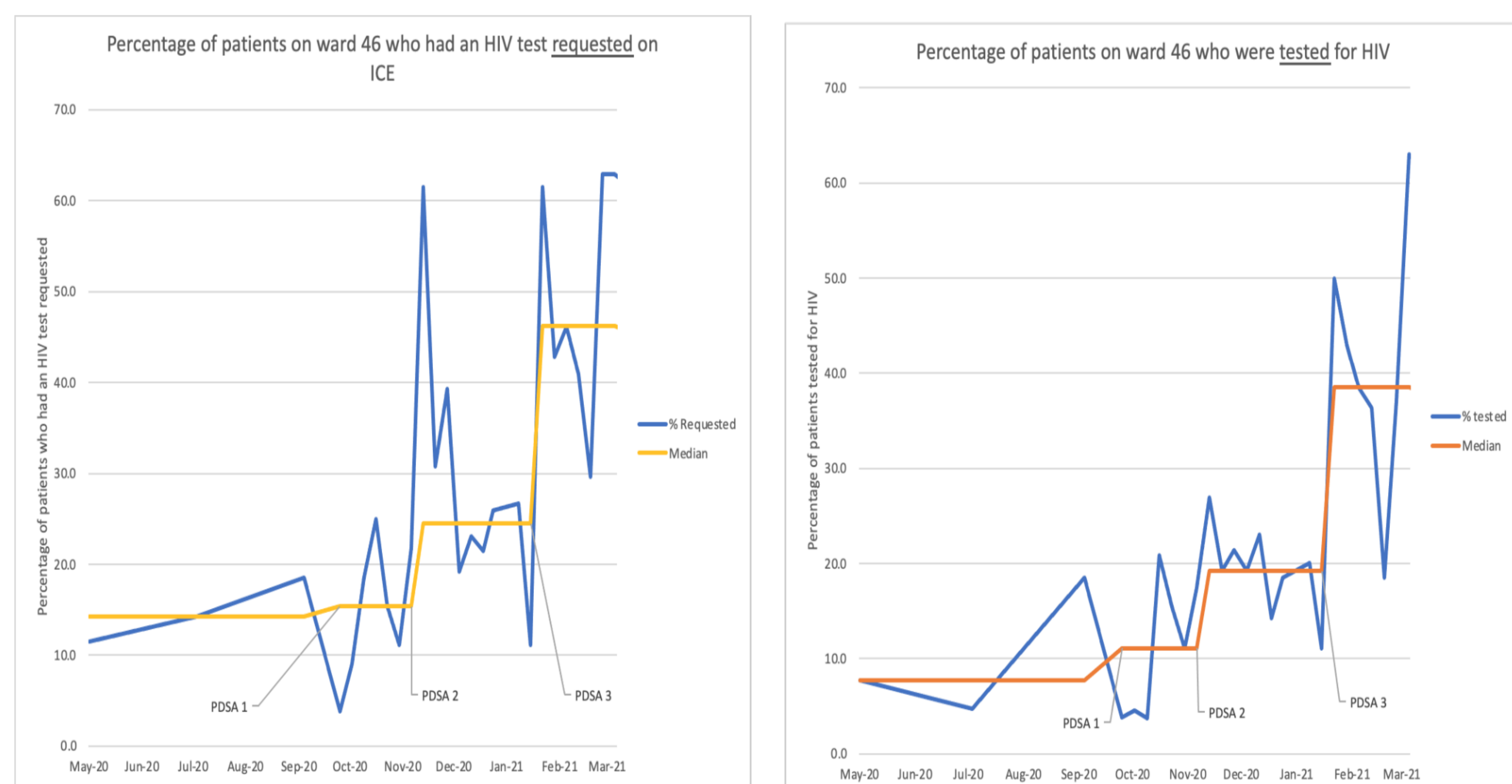


Figure 2 – run-chart 1 (left): percentage of patients with tests requested; run chart 2 (right): percentage of patients tested for HIV

Discussion

This quality improvement project demonstrates that simple interventions such as staff education and prioritisation of testing at board rounds can significantly increase the offer and uptake of HIV testing.

In addition, it highlights the importance of junior doctor-led testing initiatives to increase adherence to BHIVA HIV testing guidance. In places where local widespread HIV screening is not available — due to insufficient testing infrastructure or lack of organisational commitment to screening — junior-doctor led projects are a valuable means to increase testing. As such junior doctor initiatives should be encouraged. Subsequent to this project, widespread HIV screening was rolled out in the emergency department of the Manchester Royal Infirmary.

References

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