

# Practical challenges implementing national HIV testing guidelines in general medical admissions

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## **Background**

- The local HIV prevalence is 5.23 per 1000 population (HPA 2010). HIV care in the hospital is provided by the Manchester Centre for Sexual Health. As recommended by national testing guidelines, routine opt-in HIV testing in acute medical admissions commenced on June 2011 in Manchester Royal
- This service was led by the GUM team in conjunction with the Acute Medicine physicians and had executive team support at the trust. The change was supported voluntary organisations and promoted by the media department of the trust.
- Patients presenting to the acute medical take, either referred by primary care or via the emergency department, were offered HIV testing regardless of perceived risk status. This could be offered by the admitting nurse or doctor and was then reviewed at the post take ward round and documented in the medical admission proforma by the on call medical consultant.
- During the first six months of the testing strategy, 8 people were newly diagnosed with HIV and 1263 tests were performed. This equated to only around 30% of general medical admissions.

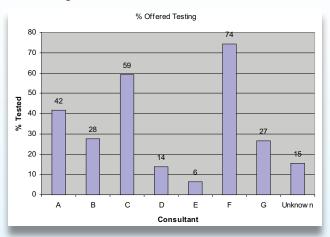


Fig 1+2: Testing behaviour over first six months

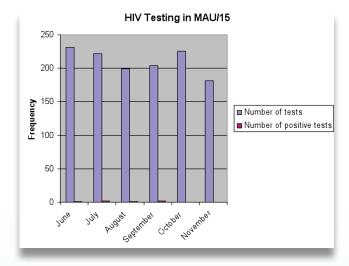
The authors wished to examine why testing did not appear to be universal and whether this was patient or clinician dependent.

# **Methods**

A prospective real-time audit over two weeks in July 2011; this was around eight weeks after implementation of the testing strategy. A template agreed by both clinical teams was completed by the audit team with a focus on demographics, clinical presentations and testing behaviour. This data was collected by a foundation year 2 doctor working in the Manchester Centre for Sexual Health.

## Results

- 435 patients attended hospital during the audit period. This included 5 known HIV positive patients and one patient who did not disclose their positive HIV status to acute physicians. They were excluded from the analysis.
- The median age of those admitted was 62 years (range 17–98) and 231 of these (53%) were male. 134 (31%) of general medical admissions were offered HIV testing. Of those patients, 117 (87%) accepted the test and were subsequently tested for HIV during the two week audit period. Of the patients tested for HIV during the two week audit period, none were found to be HIV
- 6 of 134 (4.5%) patients tested were offered testing by their nurse and most of the remainder were offered by medical staff.
- Different physicians had different offer rates ranging from 6% to 74% as per the following table. There was no correlation between clinical medical speciality and offer rate. Some acute physicians had lower testing rates than their general medical colleagues.



### Figure 3: Offer rate by consultant

- Those patients offered testing were older (median 74 vs 65; p=0.01) than those not offered but patterns of marital status (p=0.40) and ethnic origin (p=0.38) were similar in both groups. Therefore we cannot conclude that certain perceived high risk groups by ethnicity and marital status were disproportionately offered testing
- 24 patients (6%) were deemed to be incapacitated on admission. 7 of these patients (29%) were tested under best interest guidance issued by the General Medical Council.

### Examples of HIV positive diagnoses since the policy change

- 1. 41 year old female healthcare worker presented with abdominal pain thought to be gastritis. Tested positive for HIV – on direct questioning has child known to be HIV positive at nearby centre and previously declined HIV testing herself. Baseline CD4 count 223 and started anti-retrovirals following diagnosis.
- 2. 45 year old male with steroid induced diabetes following Bell's Palsy. Regular female partner subsequently also tested positive for HIV. Baseline CD4 count 247 and patient started anti-retrovirals following diagnosis.

# **Conclusion**

- Universal HIV testing of general medical admissions in high prevalence areas of the United Kingdom is a goal not yet achieved through this service change. The audit was early in the change process and demonstrated further education is required to consolidate change in HIV testing behaviour amongst healthcare workers. Despite the testing education sessions prior to the service change, most tests were performed by medical staff rather than other healthcare professionals.
- Physician variability is more significant than patient acceptability in predicting HIV testing behaviour. This concurs with previous evidence supporting inter-physician variability (HPA 2010).
- The demographics of those tested were not different to those not offered testing. This negates the concern that people with perceived risk factors were being disproportionately offered testing. Support from the voluntary organisations in Manchester has been invaluable in the publicity surrounding the change in policy. The publicity meant that some patients were actively asking for a HIV test on arrival to medical admissions. The change in patient expectations in the acute medicine department may be a driver to improve
- The future focus for the service is to offer to test all patients as recommended by the national guidance. Further education and training of clinicians has been undertaken to improve the offer rate in the interim. A re-audit is planned in the near future to examine how uptake rates vary over time.