Action points

Participation in the audit programme increased during 2009–10 to a record of 150 sites altogether. Based on the findings:

Commissioners should:

- Develop incentives (e.g.: commissioning for quality and innovation) to promote implementation of NICE guidelines and increase uptake of HIV testing across a range of clinical settings.
- In higher prevalence areas, this should include routine testing of medical admissions and patients registering in general practice.
- Work with clinicians to develop pathways and ensure patients testing positive are seen promptly by an HIV specialist.
- Focus on general practice and on gastroenterology and haematology outpatients as offering particular scope for improving timeliness of HIV diagnosis.

HIV clinicians should:

- Redouble their efforts to engage with clinical colleagues and promote implementation of HIV testing guidelines.
- Review procedures to enable new HIV patients to be seen quickly and ensure optimum use of test technologies.

Note: BHIVA has sent each audit participating site a report comparing its performance with national data, for use in action planning.

HIV testing and diagnosis

The main project for the year was an audit of 1112 patients first seen in specialist services in 2010 after testing HIV positive, plus a survey of testing practice and policy. In parallel with this, the National Institute for Health and Clinical Excellence (NICE) published guidance on increasing uptake of HIV testing among men who have sex with men and among Black Africans living in England, which addresses similar themes.

Full results are available from the BHIVA website, but key findings and issues were:

- Late diagnosis remains a major problem. Half (52%) of patients were diagnosed with a CD4 count below 350 cells/mm³, the level at which guidelines recommend starting treatment, and 30% with a CD4 count below 200 cells/mm³.

- Testing is recommended routinely in GUM and antenatal clinics, but despite guidelines this is not always the case in tuberculosis, hepatitis, drug dependency and termination of pregnancy services. At the time of the audit very few sites recommended testing routinely for medical admissions.

- Patients who were tested in services where this was recommended routinely were less likely to be diagnosed late (58% had CD4 above 350 cells/mm³ against 36% of those tested in other settings).

- Most patients continue to be diagnosed in GUM (54%) but for 10% the positive test was done in general practice. Only 7% of patients had their positive HIV test done in outpatients (other than sexual health, antenatal, drug dependency or termination of pregnancy services).

- Over 14% of patients tested positive during an inpatient admission (including 1% in intensive care). Two-thirds of this group were diagnosed with a CD4 count below 200 cells/mm³, suggesting many of these admissions might have been avoidable through earlier testing elsewhere.
Between the start of 2008 and testing positive, more than a third (37%) of patients had had indicator conditions for which they should have been offered an HIV test. As shown in Figure 1, in many cases a test was not offered, delaying the diagnosis. Even when the test was offered, this was sometimes after several months and other investigations.

The most common conditions for which patients had sought care without being offered an HIV test were persistent diarrhoea/weight loss, blood dyscrasias, lymphadenopathy and mononucleosis-like illness (which could include primary HIV infection). Consistent with this, patients had most often been seen in general practice or in gastroenterology or haematology outpatients, indicating that these are the settings in which there is greatest scope for improving timeliness of HIV diagnosis.

Data on the time to see an HIV specialist after testing positive was incomplete, but only 62% of patients were definitely seen within 14 days, as shown in Figure 2. This suggests pathways need to be improved to meet NICE guidance that patients should be seen preferably within 48 hours and certainly within 2 weeks of a positive test result.

A small number of sites are not yet routinely using fourth-generation antigen/antibody tests, which can detect HIV sooner after infection than antibody-only tests. More than half of sites use point-of-care testing in some circumstances, which is good. Twenty-nine percent of sites report unsatisfactory laboratory turn-around times of 5 or more days for routine, non-urgent confirmed positive HIV tests (not reference laboratory confirmation).

HIV specialists actively promote testing in other clinical services. Every site reported at least one action, the most common being giving presentations (90%), presenting late HIV diagnosis cases at grand rounds (86%) or raising HIV testing in relation to cases presented by others (83%). However only a minority had specifically asked their trust medical director to consider routine testing for all general medical admissions (16%).

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Figure 1: Number of cases of more common indicator conditions prior to testing HIV positive. Shading denotes: patient was offered a test at the time of the condition (●); was not offered a test (□); or it is not known whether a test was offered (□□).

Figure 2: Percentage of patients seen by an HIV specialist health professional by time in days from first reactive test.

Note: graph does not approach 100% because of incomplete data.
Future of the audit programme

Since its inception in 2001, the BHIVA audit programme has involved selecting a different topic each year. This approach suited a period of rapid evolution in clinical practice, but as HIV medicine has matured it is now appropriate to shift towards more systematic audit and re-audit of key indicators, with analysis of variation and support for local improvement where necessary. The Subcommittee has accordingly agreed significant changes including that:

- Future audits will be scored to enable between-site comparisons in outcomes. It should be stressed that any variation may be due to factors other than quality of care, e.g. different case-mix.
- Clinician members of the Subcommittee will contact sites with apparently poorer outcomes to explore and seek to understand the reasons for this, and to offer support in improving services, if any deficiencies are identified.
- It is hoped that this more systematic approach will not preclude supplementary audit of topics of particular interest.

The 2011–12 audit programme has been designed to test out this new approach, and will assess virological outcomes in unselected adults with established HIV infection. The audit sample will be based on patients seen in each site during 2009, to enable analysis based on both those who are still in care and those who have stopped attending. This will be accompanied by a survey of provision of psychological and adherence support, recognising that poor outcomes often reflect patient factors.

Further change and expansion is anticipated following a proposal BHIVA submitted for inclusion of HIV care within the National Clinical Audit and Patient Outcomes Programme managed by the Healthcare Quality Improvement Partnership (HQIP) on behalf of the Department of Health. A parallel proposal relating to sexually transmitted infection management was submitted jointly by the British Association for Sexual Health and HIV and the Medical Foundation for AIDS and Sexual Health. Both proposals have been accepted by the Department of Health to come together as a new single national audit programme which will be procured by HQIP. The expectation is that a procurement process will begin during 2012 once funding becomes available, enabling the new programme to become operational in 2013.

Audit publications

Publication and feedback is an essential part of the audit cycle, to enable clinicians and others to reflect on findings and change practice if necessary. The Subcommittee sends each clinic or department a confidential summary of its own results with aggregated data for comparison, as well as presenting national results at conferences and on the BHIVA website at www.bhiva.org.

The Subcommittee also seeks to publish its major findings in appropriate peer-reviewed journals. Publications to date include:

4. Street E, Curtis H, Sabin CA, Monteiro EF, Johnson MA; British HIV Association (BHIVA) and BHIVA Audit and Standards Sub-Committee. British HIV Association (BHIVA) national cohort outcomes audit of patients commencing antiretrovirals from naïve. HIV Medicine, 2009, 10, 337–42.
5. Lomax N, Curtis H, Johnson M; British HIV Association (BHIVA) and BHIVA Clinical Audit Sub-Committee. A national review of assessment and monitoring of HIV-infected patients. HIV Medicine, 2009, 10, 125–128.
9. Curtis H, Johnson MA, Brook MG; British HIV Association (BHIVA) and BHIVA Audit Sub-Committee. Re-audit of patients initiating antiretroviral therapy. HIV Medicine, 2006, 7, 486.
### Outcomes review

The Subcommittee has reviewed existing BHIVA clinical guidelines to identify potentially auditable outcomes, and will liaise with the Guidelines Writing Subcommittee to ensure inclusion of suitable indicators in future guidelines.

### Standards for HIV care

A working group has been established to update the 2007 Standards for HIV Clinical Care produced by BHIVA and endorsed by the British Association for Sexual Health and HIV, the British Infection Society (now Association) and the Royal College of Physicians. At its initial meeting the group agreed to liaise with NICE with a view to producing new standards through a partnership process.

### Primary care

A working group including patient representatives and members of the Royal College of General Practitioners Sex, Drugs and HIV Group has continued during the year. Best practice guidance on specialist communication with GPs is in preparation and the group is working to update HIV-related content for GP Notebook, an online service widely used in primary care. Resources for patients on how to make effective use of primary care are also planned.

### Climate™ HIV care record system

The Audit and Standards Subcommittee is represented on a steering group supported by NHS Innovations, which aims to develop and roll out the Climate™ clinical record system initially produced at North Middlesex Hospital and to work towards a common data-set for HIV. Widespread implementation of such a record system could potentially enable automated collection of audit data in future.

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**Further information**

Details of previous BHIVA audits together with specimen questionnaires, findings and reports, the list of articles, and further resources are available on the BHIVA website at:

www.bhiva.org/AuditandClinicalStandards.aspx

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