

# HIV testing and linking into care : a clinical governance exercise

Sharmini Ramasami, Jessica Lightburn, David Chandler and Monica Lascar  
Whipps Cross University Hospital, Barts Health NHS

## Introduction

There has been widespread promotion of expanded HIV testing initiatives for opt-out testing in other healthcare and community settings beyond traditional ones (eg; GUM and antenatal clinics).<sup>1</sup>

Pilot studies have demonstrated the feasibility and acceptability of this approach. There is little data about the clinical governance of HIV testing to ensure that all positive and indeterminate results are acted upon.

Timely result provision allows earlier assessment and treatment of individuals with or at risk of AIDS-defining illness and reduces onward transmission.

We conducted a baseline evaluation of our current performance prior to the introduction of opt-out HIV testing in the medical admissions unit.

We aimed to evaluate the robustness of :

- The HIV testing process of our local virology laboratory that serves a catchment area of high HIV prevalence (4.56 per 1000)
- Newly diagnosed patients
  - being given their positive result promptly.
  - appropriately linked into HIV care.
  - seeing an HIV specialist within time limit recommended by BHIVA guidelines.

## Audit Standards

The following standards or recommendations from BHIVA guidelines were used for this audit:

- HIV testing including confirmation should follow Health Protection Agency standards.<sup>2</sup>
- Result of an HIV test (if positive) should be given directly by testing clinician or team.<sup>2</sup>
- Newly diagnosed HIV patients should be assessed within a specialist service within 2 weeks of a positive test results.<sup>3</sup>

## Methods

•All HIV test requests processed by the virology laboratory from 01/01/09 to 31/12/10 were identified using their database (Synergy).

•Reactive and equivocal tests were noted including source of request. Patient identifying details were compared to exclude duplicate tests.

•Main hospital and GUM casenotes of confirmed HIV diagnoses were reviewed to ascertain:

- if the case was a new HIV diagnosis
- the time from test date to patient being given the result
- if the patient was referred and seen at our Department of Sexual Health (DOSH)
- the time from being given a positive result by a healthcare professional to being seen by an HIV specialist

•Virology use the VIDAS® assay (a fourth generation test) for HIV testing.

• Reactive/Equivocal samples are tested with an in-house confirmatory assay

•Confirmed positive or indeterminate results are sent to HPA reference lab.

## Results

### HIV testing and confirmation

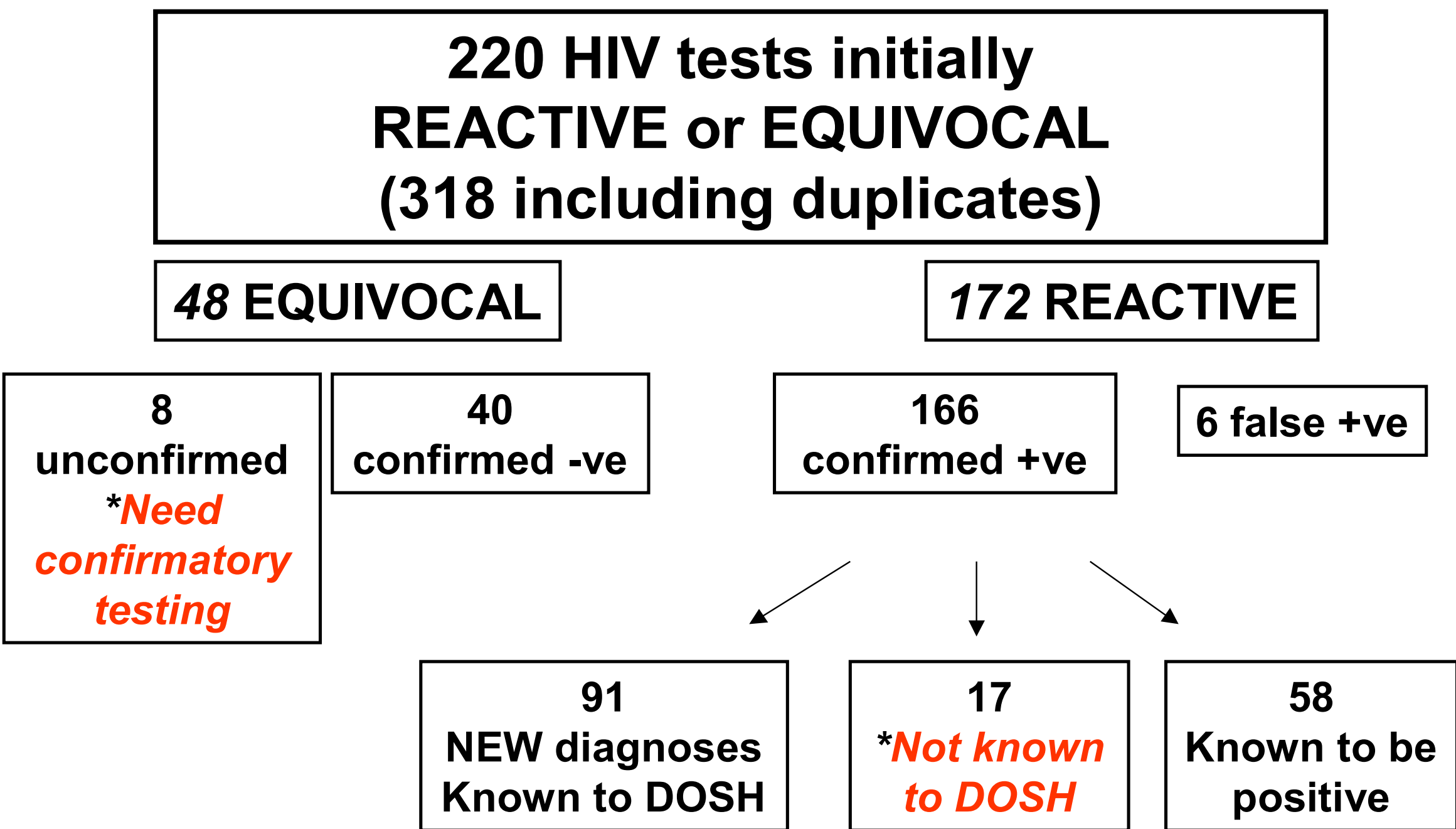


Fig 1: Initial HIV test results and outcome of confirmatory testing

### Equivocal Results

- 40/48 equivocal results were retested with confirmatory assays and reported negative.
- 8/48 (16%) of equivocal results were identified by our audit as not having been repeated in accordance with confirmatory testing protocols.
- This was highlighted to the virology lab. Stored samples were sent to HPA reference lab (Colindale) to be retested.
  - 5/8 were negative
  - 2/8 were reported as indeterminate
  - 1 sample was insufficient for repeat testing

### Linkage into HIV care

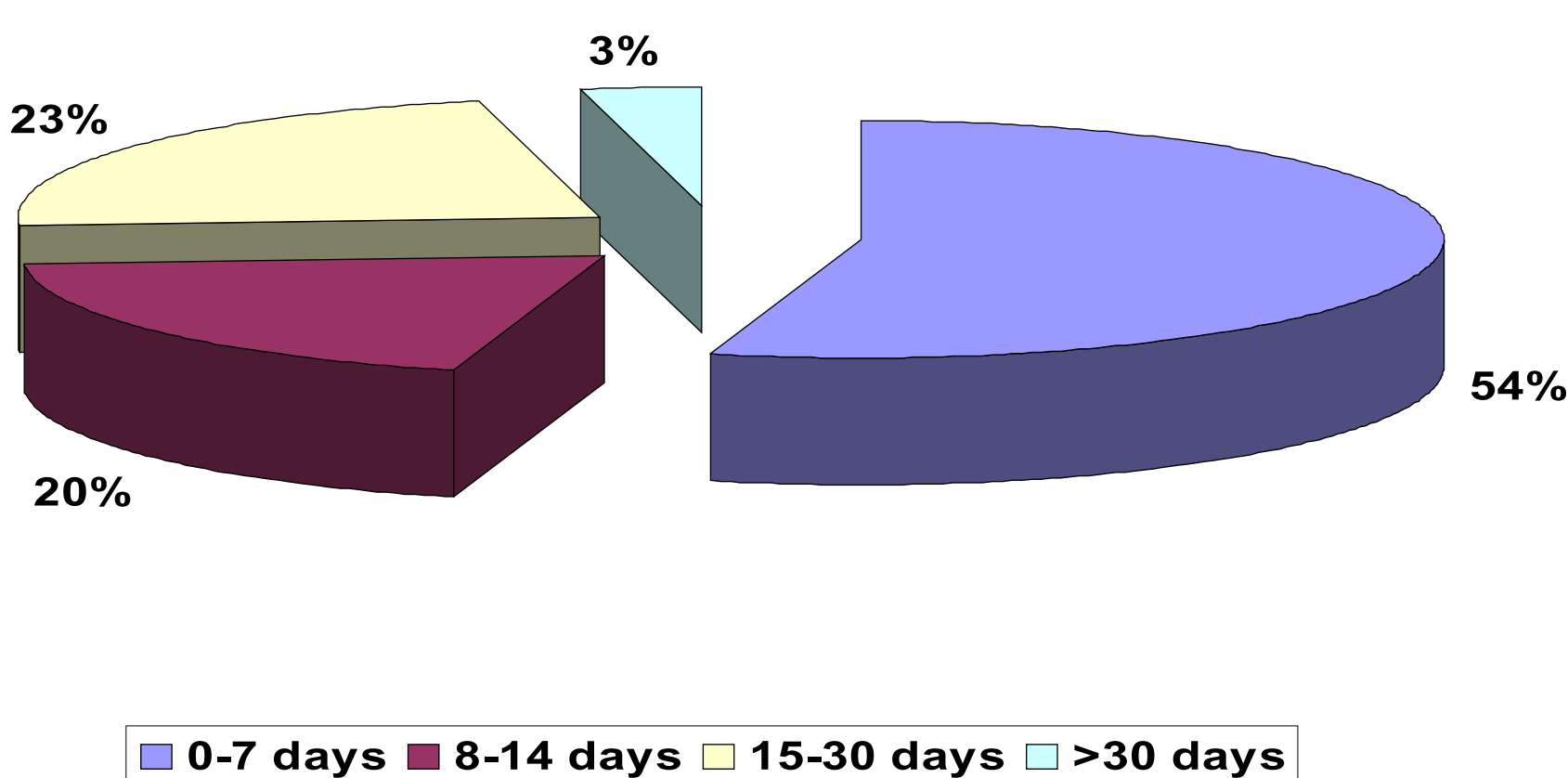
- 149/166 of confirmed HIV+ve patients had been linked into care with our department.
  - 91/149 were newly diagnosed
  - 58/149 were already known to be HIV+ve and transferred their care from another centre
- 17/166 pts had no record of attending our DOSH. Source of test: 5 GP, 3 A&E, 3 Inpatient, 1 Antenatal, 4 Outpatient, 1 Family Planning clinic
  - 12/17 have been subsequently confirmed to be linked into care at another HIV centre.
  - 1patient tested positive as an inpt and was discharged without being given this result and has not been contactable.
  - 4/17 cases still awaiting notes review to ascertain the outcome.

### Time to receive a positive HIV result

61/91 of newly diagnosed patients had a clearly documented date when they were informed of their HIV positive result.

45/61 (74%) were informed of their results within 2 weeks (Fig 2).

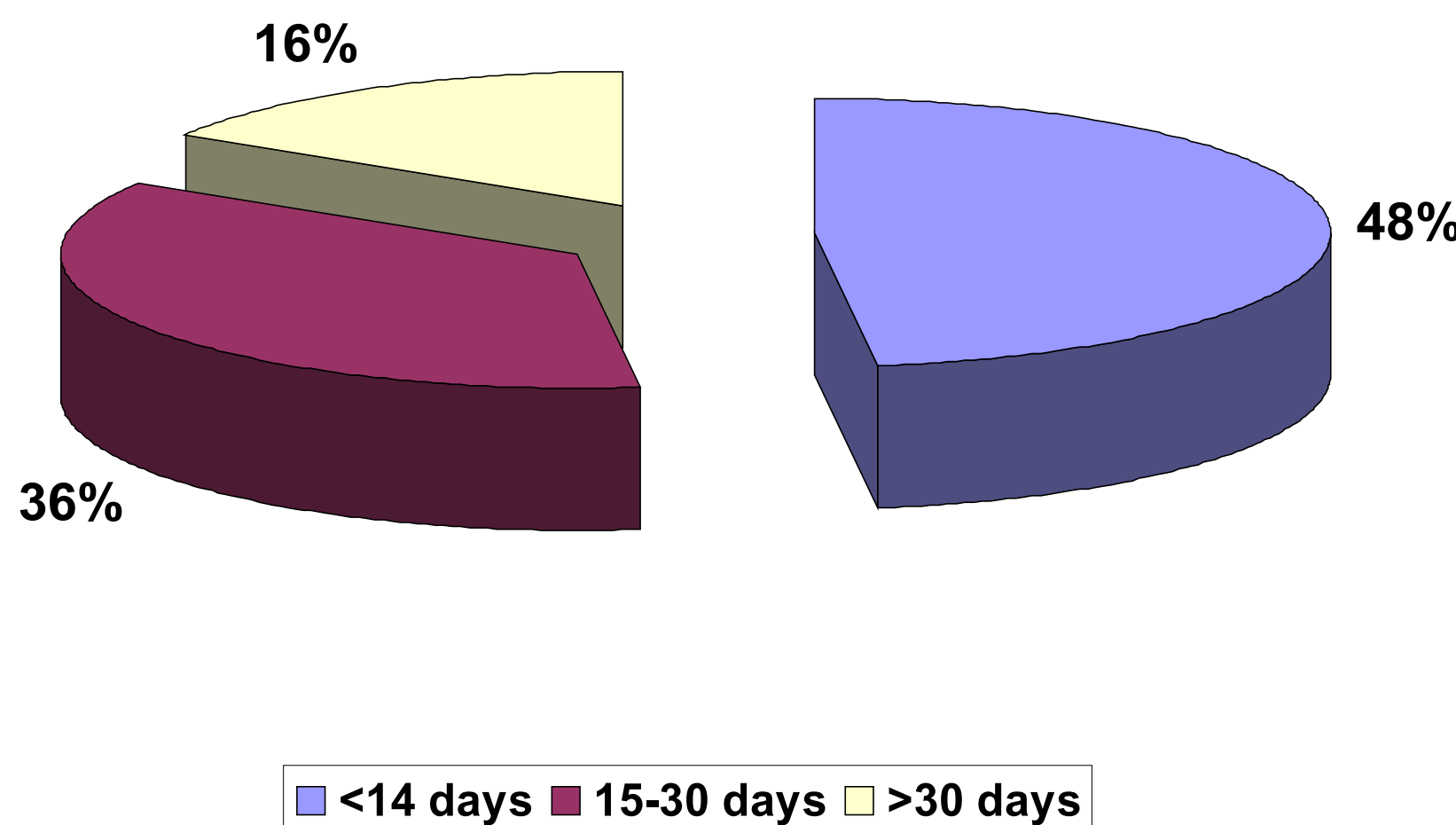
Fig 2 Time to HIV+ result given to patient



### Time to be seen by a HIV specialist

- There was data available for 50/91patients.
- 11/61 cases were excluded:
  - 7 patients transferred their care to another HIV centre after being given their initial diagnosis
  - 4 were lost to follow-up
- 24/50 (48%) patients were seen by an HIV consultant within 2 weeks of being informed of their diagnosis. (Fig 3)

Fig 3 Time from HIV+ result to Specialist review



## Conclusions

We identified equivocal samples that were not repeat tested by the lab and subsequently reported as indeterminate by the HPA lab. These may be from seroconverting patients and highlights the need for tighter protocols for confirmatory testing.

26% of newly diagnosed patients were informed of their diagnosis after >2weeks. This delay was frequently caused by the lack of electronic notification by the lab and the existing system of paper copies of HIV positive results being sent by internal mail.

Only 48% of newly diagnosed patients were seen within the recommended 2 weeks. Patients diagnosed as outpatients and by their GPs had greater delays in linking into care.

We need to ensure that clear, well-publicised and if possible, electronic referral pathways are available to hospital and community healthcare staff and build stronger links with local GPs to facilitate optimal linkage into care

Although it is the responsibility of the testing clinician to ensure positive and indeterminate results are promptly acted upon, we have demonstrated that 1 (and possibly other patients) have not been informed of their HIV diagnosis.

There is a strong case for local HIV teams to be proactive in collaborating closely with the lab to routinely monitor the governance of HIV testing and result provision.

In light of our audit findings, the following initiatives are being implemented :

- Availability of all HIV reactive/equivocal results to DOSH team. These are to be reviewed on a weekly basis to check if actioned appropriately.
- Introduction of an automated HIV testing platform which ensures in house confirmatory testing
- Patients attending DOSH for an HIV test will receive their results by text rather than 'no news is good news'. A record of all HIV test requests will be made and checked for a result to ensure that there are no outstanding results.

We plan to repeat this governance exercise after the introduction of opt-out HIV testing in medical admissions.

### References:

1. Health Protection Agency. Time to test for HIV: Expanding HIV testing in healthcare and community services in England: Final report 2011.
2. British HIV Association, British Association for Sexual Health and HIV, British Infection Society. UK National Guidelines for HIV testing. 2008.
3. British HIV Association, British Association for Sexual Health and HIV, British Infection Society. Standards for HIV Clinical Care. 2007