BHIVA national clinical audit of ART

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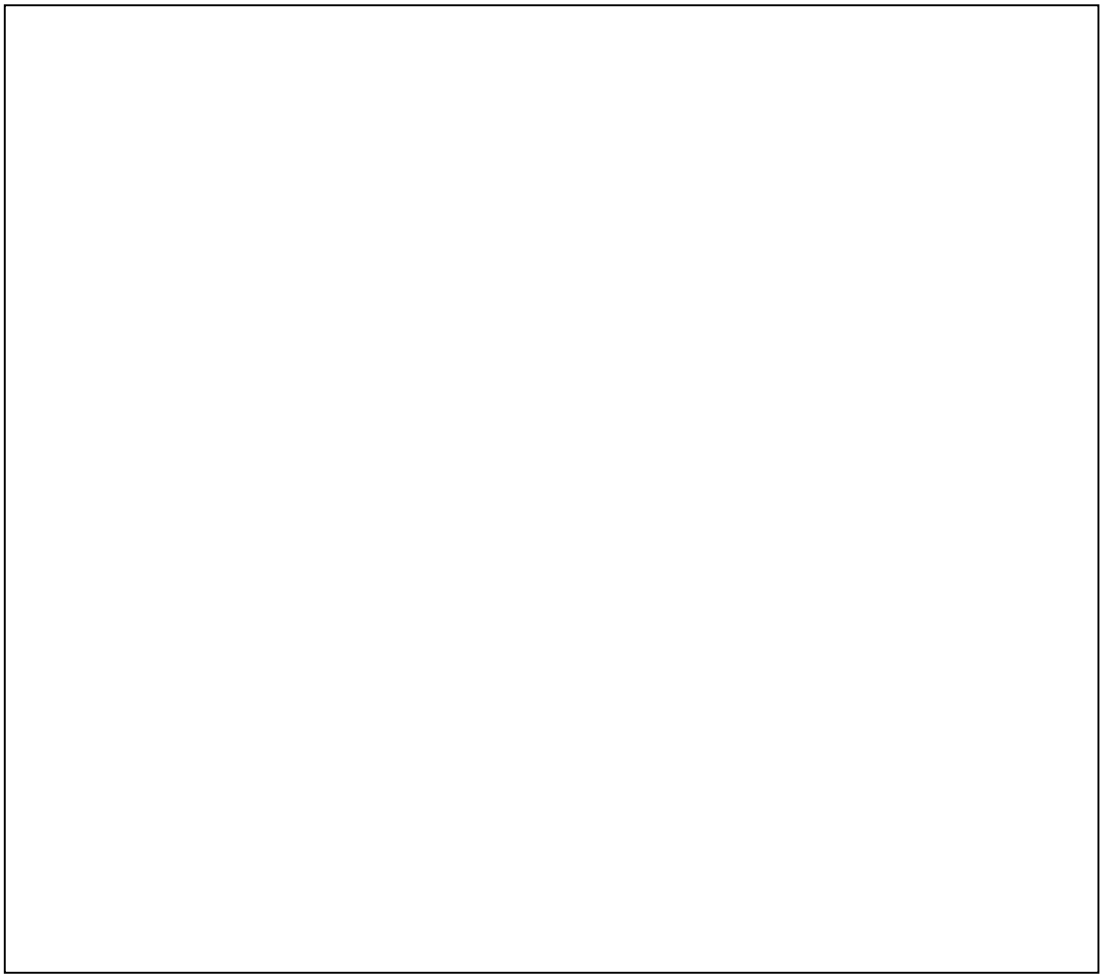
2002 audit preliminary results

Survey of:

- Clinic practice & policies on treatment initiation
- Follow-up of 2001 audit
- Arrangements for maternity care

Case note review:

- Patients starting treatment from naive



Characteristics of participating centres

Size (number of HIV patients)	Total	London NHS region	Outside London NHS region
1-100	62	6	55
100-500	39	14	25
501+	10	8	2
Total	113	28	82

NB totals do not add because some centres did not state their size and/or region.

90 centres stated their actual case-load (HIV patients seen in preceding 6 months). The total for these 90 centres was 21791.

True total case-load may be lower – we cannot exclude double-counting of patients who attended more than one centre.

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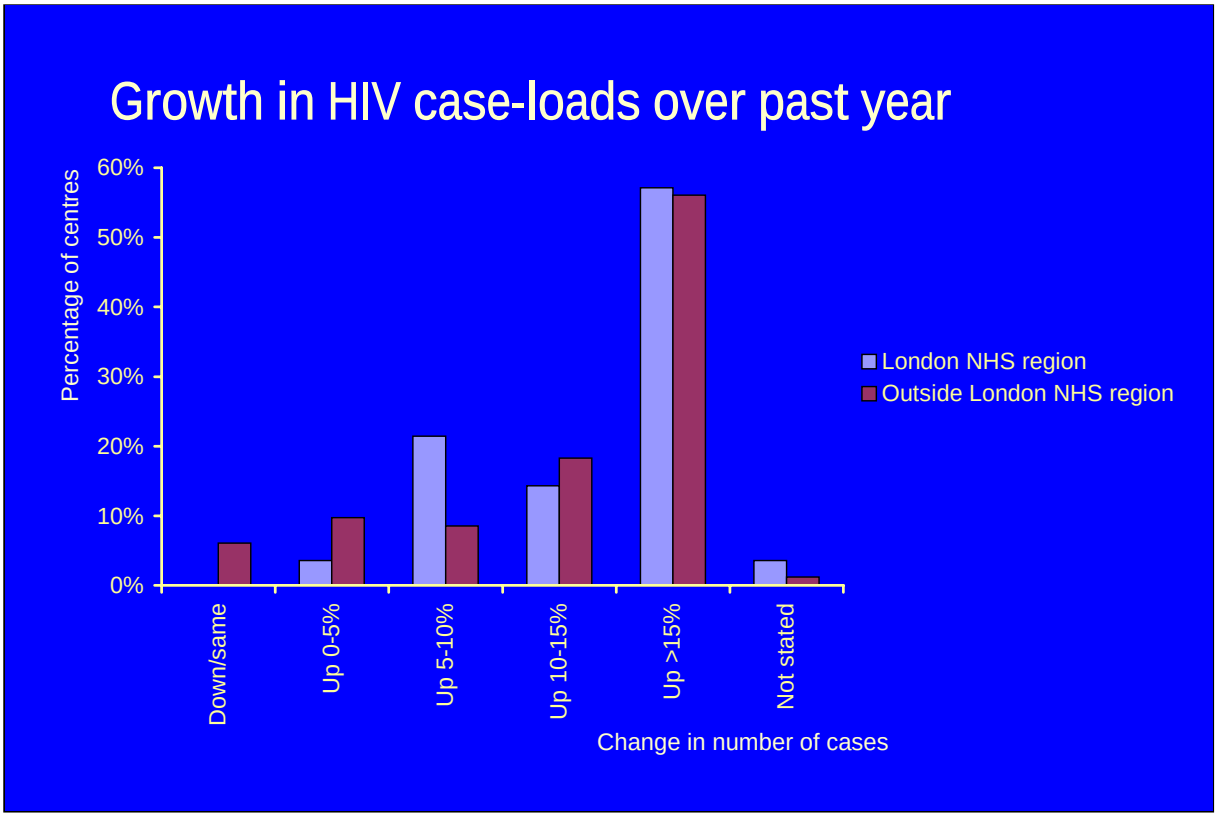


Growth is most notable in medium sized centres:

Overall, 56% of centres report >15% growth

49% of centres with fewer than 100 patients report >15% growth

76% of centres with 100-500 patients report >15% growth

30% of centres with >500 patients (small numbers) report >15% growth

Not much difference in percentage terms inside/outside London.

Local policies on starting treatment

- 84 (74%) centres say their policy is to follow BHIVA guidelines
- 15 (13%) have local policy/guidelines which supplement BHIVA
- 4 (4%) have no local policy/guidelines
- 10 (9%) did not answer.

- 38 (34%) have local policy/guidelines on adherence
- 66 (58%) do not
- 9 (8%) did not answer.

Restrictions on choice of ART drugs

- 99 (88%) of centres have no restrictions
- 2 (2%) have restrictions due to cost
- 2 (2%) have restrictions due to clinic policy
- 1 (1%) has restrictions for other reasons
- 9 (8%) did not answer.

Clinics' stated practice re follow-up of patients starting ART from naive

First review of patients starting ART:

- 71 (63%) of centres within 1-2 weeks
- 33 (29%) at 2-4 weeks
- 2 (2%) at 4-8 weeks
- 7 (6%) did not answer.

First VL after starting ART:

- 43 (39%) of centres within 4 weeks
- 20 (18%) at 6 weeks
- 20 (18%) at 7-8 weeks
- 20 (18%) at 10-12 weeks
- 10 (9%) did not answer.

NB this is clinicians' reported practice, not actual patient data.

Pharmacy arrangements

34 centres (31%) have dedicated HIV pharmacist support – however, as these are larger centres they serve 73% of the total reported patient case-load.

20 centres (18%, serving 6% of caseload) have pharmacist(s) with a special interest in HIV and 42 (38%, serving 14% of caseload) use generic hospital pharmacy services.

1 centre (1%, serving 0.2% of caseload) used community pharmacists and 13 (12%, serving 7% of caseload) did not say.

Of those who did not answer the specific question, two commented that they had no pharmacist support (1 “on site”, 1 “at this outreach service”) and one said there was a dedicated pharmacist at another hospital in the same trust.

Of those using generic hospital services, 2 commented that they had effectively no pharmacist support, and one said “lack of pharmacy backup is deplorable”. One had a pharmacist with a special interest in infection.

Patient data: starting treatment from naive

942 patients:

- 56% male, 44% female
- 55% Black-African, 36% white

Stated reasons for starting treatment included:

- Disease progression 802 patients (85%)
- Prevention of vertical transmission 117 (12%) – 92 as sole reason
- Patient choice 88 (9%) – 2 as sole reason both in fact with CD4 <230
- High viral load 275 (29%) – 9 as sole reason of whom 6 in fact had CD4 < 200 and/or CDC B/C
- Recent seroconversion 25 (3%)

High proportion of Black-Africans probably reflects the fact that many patients starting treatment from naïve are recently diagnosed.

NB There were clearly problems with interpretation of the question re reasons for starting treatment. In particular, some respondents did not tick “disease progression” as a reason in cases where patients were recently diagnosed with late stage disease – see data below:

Reasons are not mutually exclusive – can be multiple reasons for same patient.

13 patients started because of patient choice and/or high VL with no other reasons given:

2 starting with patient choice stated as sole reason had:

CD4 199, CDC B, VL 30-100,000 (in clinical trial)

CD4 230, CDC A, VL 500-10,000

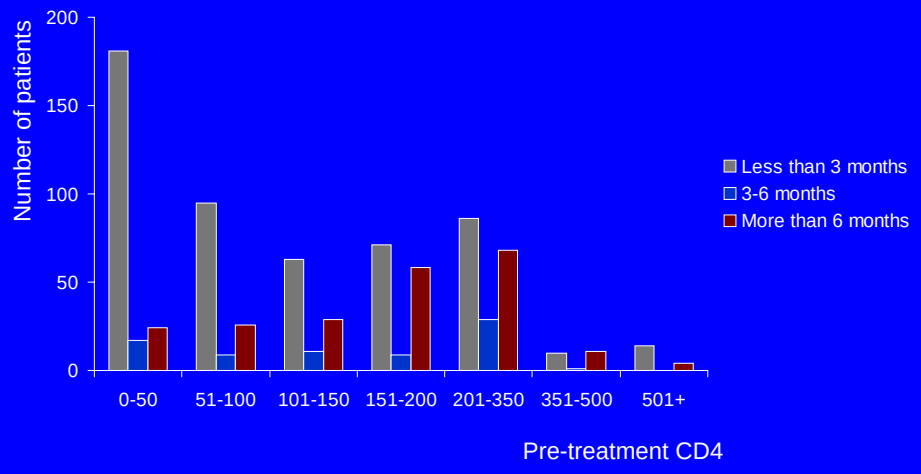
9 starting with high VL stated as sole reason all had VL >100,000:

5 had CD4 <200 of whom 4 were CDC C and 1 CDC B

1 had CD4 311, CDC A

1 had CD4 355, CDC A

Delay between diagnosis and starting treatment



Even with advanced disease, a significant minority of people starting treatment were NOT recently diagnosed.

10.6% of those starting treatment at CD4 <50 and 19.5% of those starting treatment at CD4 50-100 had been diagnosed more than 6 months previously.

Tests done prior to treatment

	Yes	No	Unstated	Total
Blood pressure	486	435	21	942
	52%	46%	2%	100%
Liver function	901	5	36	942
	96%	1%	4%	100%
Serum lipids	528	382	32	942
	56%	41%	3%	100%
Random glucose	649	256	37	942
	69%	27%	4%	100%
Hepatitis B	912	17	13	942
	97%	2%	1%	100%
Hepatitis C	761	135	46	942
	81%	14%	5%	100%

	Yes	Tested + stored	Stored only	No	Unstated	Total
HIV resistance	52	35	264	504	87	942
	6%	4%	28%	54%	9%	100%

Detailed slide may not be suitable for projection – see following charts.

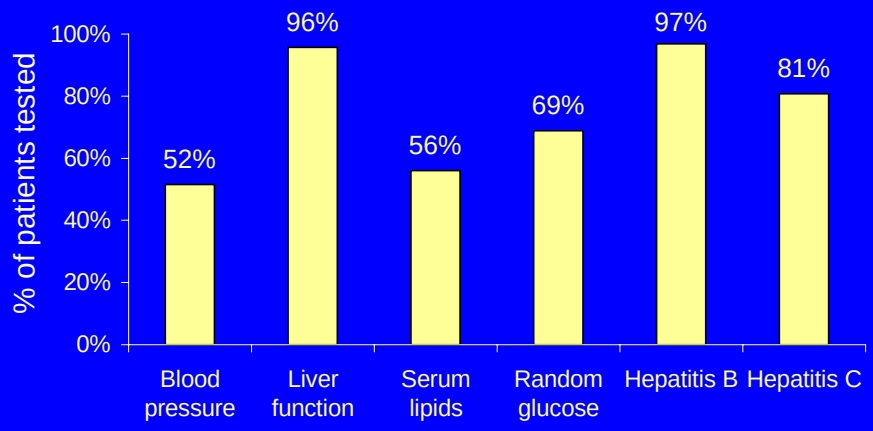
Noteworthy that 46% did not have BP, 41% did not have serum lipids, 14% did not have hepatitis C test.

HIV resistance test data is a bit uncertain – clinical centres may not always know when laboratories are storing samples.

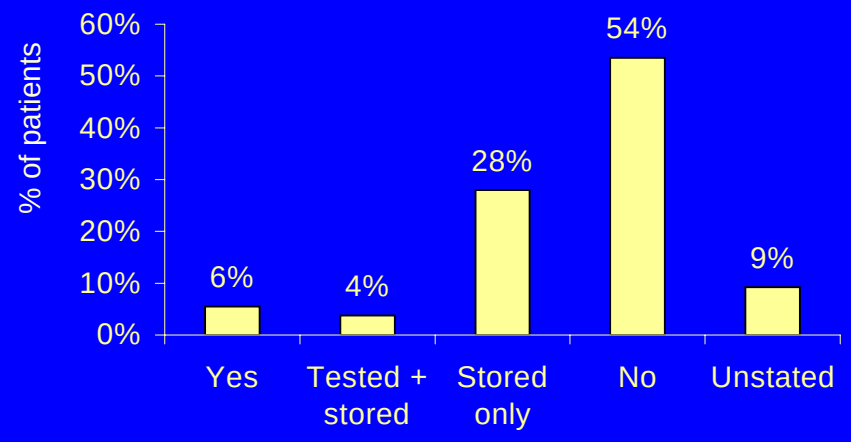
16 (18%) of those having a resistance test (ie “yes” or “tested + stored”) had “recent seroconversion” given as a reason for starting treatment.

Conversely, of the 25 for whom recent conversion was given as a reason for treatment, 16 (64%) were tested for resistance. 3 (12%) had a sample stored only, 4 (16%) were not tested, and no answer was given for 2 (8%).

Tests done prior to treatment



HIV resistance testing done prior to treatment?



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Drug combinations

65 different combinations were reported.

Number of patients	
Drugs summary	Total
2NRTI/NNRTI	606
2NRTI/PI*	91
3NRTI	119
NRTI	28
Total	844

*single or boosted

844 (89.6%) patients had been started on “standard” combinations as recommended in BHIVA guidelines – shown left:

- 311 Combivir®/efavirenz
- 203 Combivir®/nevirapine
- 35 Combivir®/lopinavir/r
- 29 Combivir®/nelfinavir
- 87 Trizivir®
- 23 Combivir®/abacavir.

All monotherapy was zidovudine for prevention of vertical transmission.

"Non-standard" combinations

Drugs summary	
2NRTI	1
2NRTI/2PI	1
2NRTI/NNRTI/blinded trial	1
2NRTI/NNRTI/TFV	3
2NRTI/PI/NNRTI	2
2NRTI/PI/TFV	1
2NRTI/TFV	3
3NRTI/NNRTI	36
3NRTI/PI	7
3NRTI/TFV	5
NRTI/NNRTI/TFV	23
NRTI/PI/NNRTI	1
NRTI/PI/TFV	3
PI/TFV/other/unlicensed	4
Total	91

Reasons for choosing non-standard combinations included:

- Efficacy (42 patients)
- Physician preference (36)
- Dosage/convenience (35)
- Toxicity minimisation (29)
- Clinical trial (25)
- Patient choice (22)
- Concomitant disease/ medication (20)

91 (9.7%) patients had been started on "non-standard" drug combinations. The one dual therapy (Combivir) was for prevention of vertical transmission.

42 different combinations of reasons were given for the choice of drugs in these patients.

Of the 35 started on non-standard combinations for whom **dosage/convenience** was cited as a reason for the choice of drugs, 12 were lamivudine/efavirenz/tenofovir, 7 were Trizivir®/efavirenz, 3 were Trizivir®/lopinavir/r. No other combination was mentioned for more than 2 patients in this group.

Concomitant hepatitis B was cited as a reason for the choice of drugs in 9 patients started on non-standard combinations, all of whom were started on tenofovir, and 7 on lamivudine. Exact combinations in this group were:

4 lamivudine/efavirenz/tenofovir

2 Combivir®/efavirenz/tenofovir

1 abacavir/Combivir®/tenofovir

1 lopinavir/r/tenofovir/FTC

1 stavudine/efavirenz/tenofovir

Combinations in the 25 started on non-standard combinations for whom **clinical trial** was cited as the reason for the choice of drugs were as follows:

19 3NRTI/NNRTI – all Trizivir®/efavirenz

Use of tenofovir

42 patients had been started on tenofovir, including 19 on lamivudine/efavirenz/tenofovir. Reasons included:

- dosage/convenience (22 patients, including 12 started on lamivudine/efavirenz/tenofovir)
- efficacy (19 patients, including 8 started on lamivudine/efavirenz/tenofovir & 3 on Combivir®/efarivenz/tenofovir)
- toxicity minimisation (16 patients including 3 lamivudine/efavirenz/tenofovir & 3 Combivir®/efavirenz/tenofovir)
- patient choice (14 patients, including 10 lamivudine/efavirenz/tenofovir)
- clinical trial (5 patients)
- concomitant disease or medication (19 patients, including 6 TB, 9 hepatitis B of whom 7 also on lamivudine, 1 hepatitis C, 5 other)

Management of HIV and pregnancy

Antenatal HIV test arrangements	
Opt in	10 (10%)
Opt out	91 (88%)
Selective	3 (3%)
Total number of centres	104

NB data is HIV clinicians' understanding/opinions.

Antenatal testing rates

Estimated proportion of AN women tested for HIV	
0-30%	3 (3%)
30-60%	6 (6%)
60-70%	11 (12%)
70-80%	19 (20%)
80-90%	24 (26%)
Over 90%	31 (33%)
Total number of centres	94

NB: Data is HIV clinician's estimates.

Follow-up of 2001 audit

Whether a formal feedback session was held	
Yes	44
No	53
Not sure	4
Unstated	12
Total number of centres	113

Feedback sessions were attended by:

- Physician(s) at 41 centres
- Nurse(s) at 29 centres
- Pharmacist(s) at 10 centres
- Other(s) at 13 centres

Completing the audit cycle

Whether clinical practice changed as a result of 2001 audit	
Yes	6
No need	82
No	11
Unstated	14
Total number of centres	113

The large number of centres reporting no need for change reflects the generally positive findings of the 2001 audit.

Summary: key points

Most centres report >15% rise in HIV caseload over past year.

38% of centres do not test VL until > 6 weeks after starting ART.

Significant delays can occur between diagnosis and starting ART even for patients with extremely low CD4.

BP, glucose +/or lipids were not measured before starting ART in a substantial proportion of patients.

Although many different drug combinations were used, most patients started on 2NRTI/NNRTI or other standard HAART.