

HIV monitoring and assessment in older adults

BHIVA National Clinical Audit 2018

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and Standards Sub-Committee

Background

- In 2016, 37.8% of people seen for HIV care in the UK were aged 50 or over
- This proportion is rising because of excellent ART outcomes and successful prevention
- While welcome, ageing among people with HIV presents increasing scope for co-morbidity and poly-pharmacy
- The 2015 BHIVA monitoring audit found low rates of recording of cardiovascular risk, bone health and immunisation

Aim

To audit routine monitoring and assessment of adults aged ≥ 50 attending for UK HIV care, covering:

- Targets specified in *BHIVA guidelines for the routine investigation and monitoring of adult HIV-1-positive individuals 2016*
- Recording and management of poly-pharmacy and co-morbidities more generally

Auditable targets

- Patients on ART with HIV viral load measured within the last 9 months or within the last 15 months if taking a PI (90%)
- Patients on ART should have a list of all current medication, or note that no medication other than ART is being taken, recorded within the past 15 months (97%)
- Patients aged >40 years with 10-year cardiovascular disease (CVD) risk calculated within the last 3 years if taking ART (90%).
- Patients with a smoking history documented in the last 2 years (90%) and blood pressure (BP) recorded in the last 15 months (90%)

Method

- Retrospective case-note review
- Inclusion:
 - Last 40 adults aged ≥ 50
 - Attending for routine care of HIV-1 infection during 2017 and/or 2018
 - All patients if fewer than 40 attendees
- Exclusion:
 - Patients with HIV-2 infection
 - Non-routine appointment attendance
- Data collection via online questionnaires

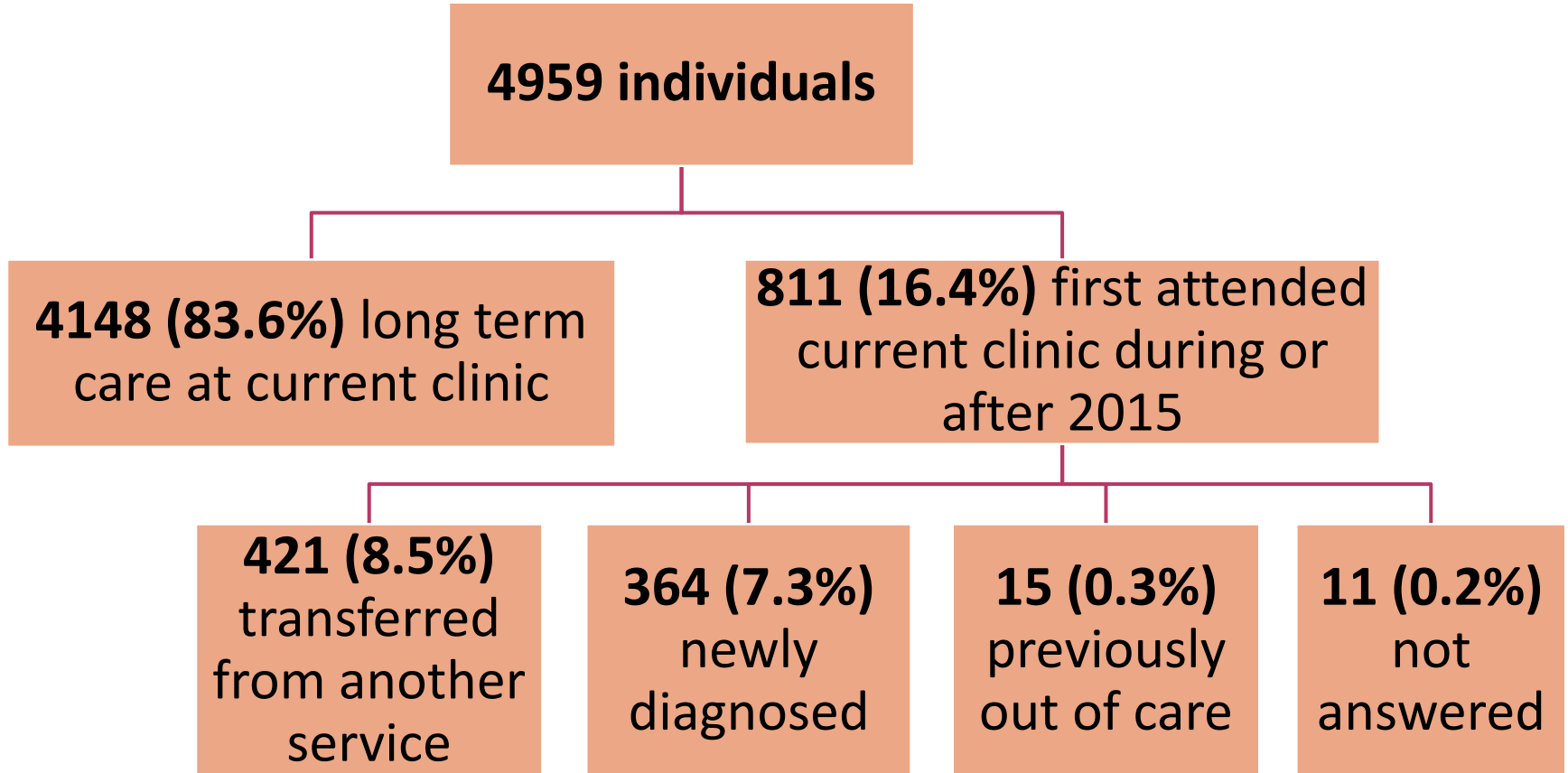
Results: 4959 individuals from
139 clinic services

Demographics

Total	4959	100%
Male	3638	73.4%
Female	1280	25.8%
Trans	7	0.1%
Not answered	34	0.7%
Heterosexual	2371	47.8%
MSM	2219	44.7%
IDU	68	1.4%
Other	66	1.3%
Not known/answered	235	4.7%

Total	4959	100%
50-54	1876	37.8%
55-59	1407	28.4%
60-64	775	15.6%
65-69	470	9.5%
≥70	414	8.3%
Not answered	17	0.3%
White	3323	67.0%
Black-African	990	20.0%
Other	532	10.7%
Not stated/answered	114	2.3%

Duration in care



Monitoring

Results for auditable targets

Outcome	No	%	Target, %	Site median (IQR), %
Patients on ART (n=4852) with VL measured within last 9 months, or 15 months if on PI	4718	97.2	90	97.5 (95.0-100.0)
Patients on ART (n = 4852) with all medications recorded within last 15 months	4555	93.7	97	97.3 (92.3 – 100.0)
Patients on ART and without CVD (n=4293) with 10-year CVD risk calculated within last 3 years	2879	67.1	90	73.1 (50.0-92.1)
Smoking history documented in last 2 years	3989	80.4	90	90.0 (70.0-97.5)
Blood pressure recorded in last 15 months	4552	91.8	90	95.0 (90.0-100.0)

Other routine monitoring outcomes

Outcome (N if not 4959, time period if not 15 mo)	No	%
Adherence if on ART (N=4852)	4536	93.5
Weight or BMI recorded	4389	88.5
Random glucose or HbA1c	3962	79.9
Random lipid profile	4466	90.1
Urinalysis or uP/C	4148	83.7
Fracture risk assessed (FRAX or DEXA, 3 yr)	2247	45.3
Asked re mood/mental health	3495	70.5
Asked re memory/cognition	1367	27.6
Asked re alcohol	3455	69.7
Asked re recreational drugs	2953	59.5

Sexual and reproductive health

Outcome (15 mo)	No	%
Sexual partner(s) and possible PN discussed	3124	63.0
Sexual health screen offered	3075	62.0
Syphilis serology tested	3668	74.0
Cervical cytology done, or advised to request (women ≤ 65 , N=1137)	768	67.5
Menopause status recorded (women ≤ 56 , N=739)	511	69.1

Recording of immunisation

Influenza vaccine: in last season

59.6% (1924)
received / advised
to request vaccine

34.2% (1694)
not recorded

5.5% (271) not
received

0.8% (40) not
answered

Pneumococcus vaccine:
ever

34.1% (1690)
received

53.6% (2657)
not recorded

11.9% (588)
not received

0.5% (24) not
answered

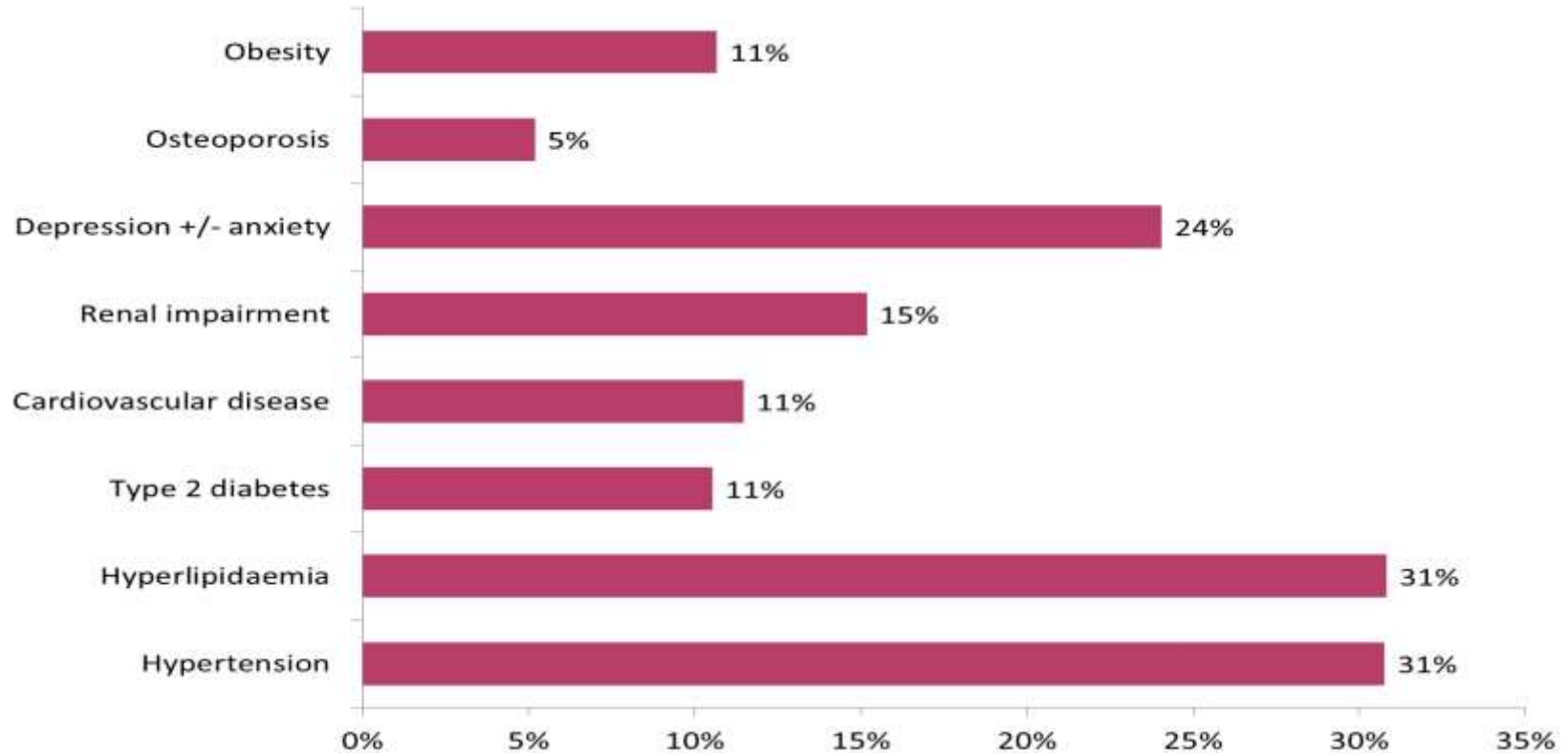
Co-morbidities and co-infection

Reporting of co-morbidities

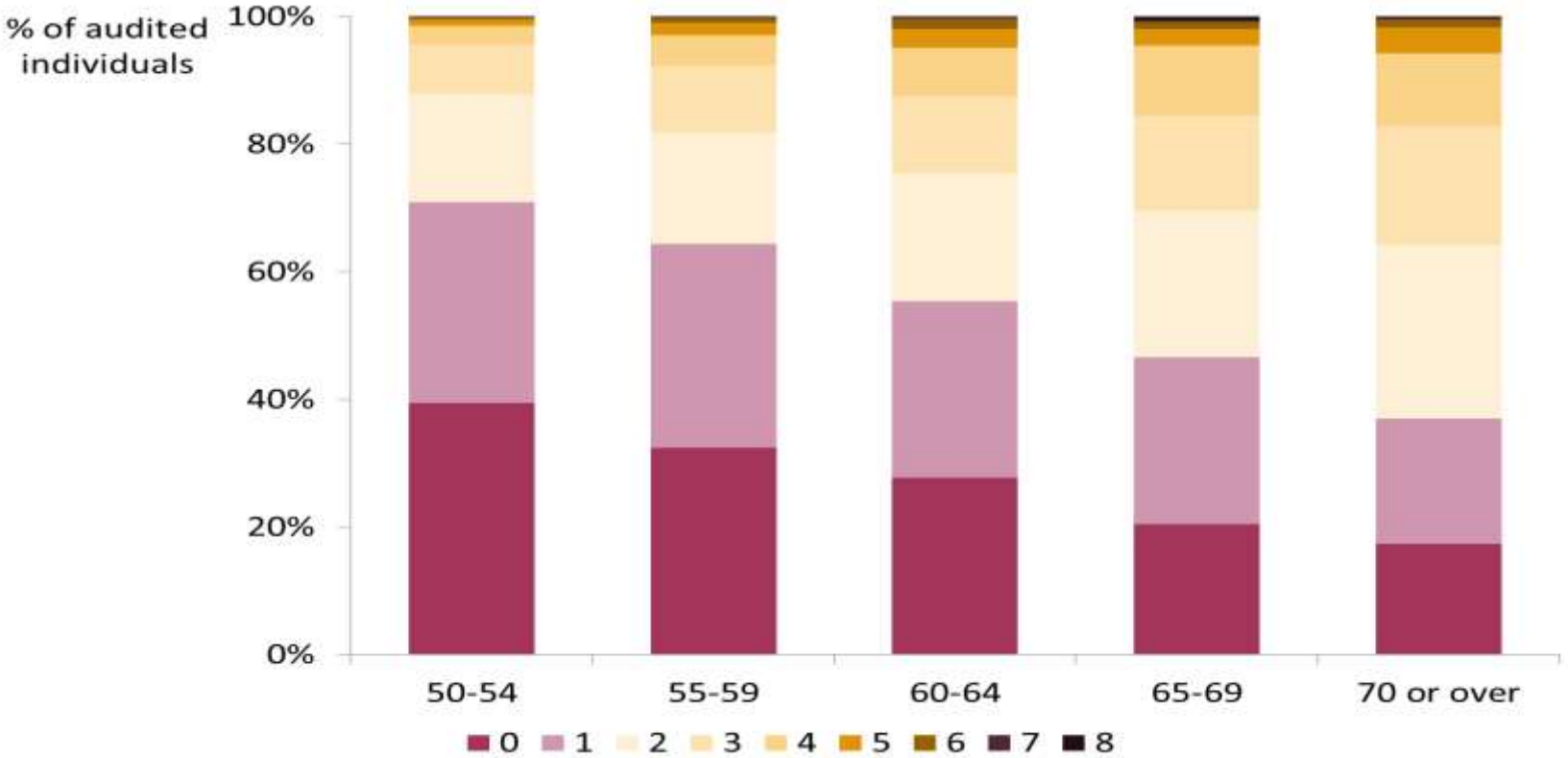
The data collection tool:

- Asked directly about 8 common co-morbidities:
 1. Hypertension
 2. Hyperlipidaemia
 3. Type 2 diabetes
 4. Cardio-vascular disease
 5. Renal impairment
 6. Depression +/- anxiety
 7. Osteoporosis
 8. Obesity
- Provided a write-in option for other/additional co-morbidities of current clinical concern

Reported prevalence of common co-morbidities



Age vs. number of common co-morbidities



Clinical impact of co-morbidities

- 334 (6.7%) individuals had recent onset/diagnosis of listed common co-morbidities (within 6 months)
 - 941 (19.0%) had other conditions of current clinical concern:
 - Either recently diagnosed or poorly controlled
 - 160 (3.2%) had both
- ❖ Thus overall 28.9% had at least one non-HIV condition likely to be of current clinical concern.

Communication and information sharing

GP registration

- 96.8% (4800) individuals were registered with a GP
- 89.4% (4431) had consented for the HIV service to communicate with their GP

Site median (IQR) registered and consenting to communication: 90.6% (84.0-95.0%)

Communication with GP

For 4431 consenting individuals, communication had taken place within 15 months for:



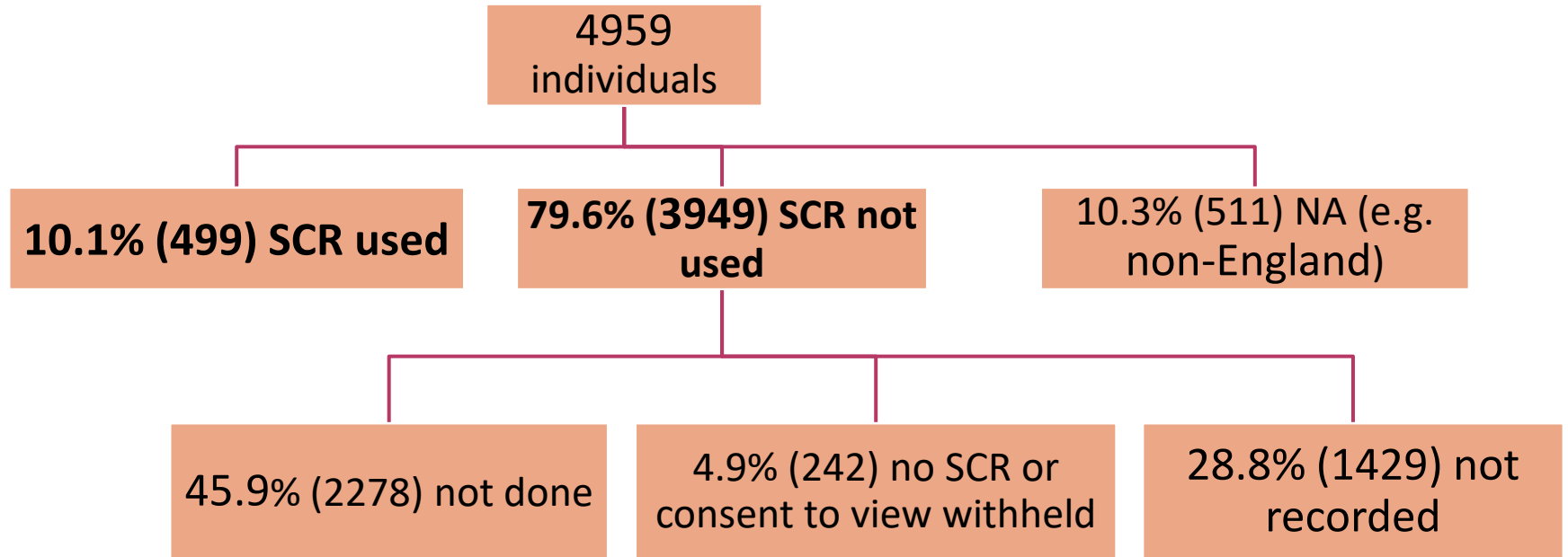
89.7 % *from* HIV service to GP



7.4% *from* GP to HIV service

Summary care record (SCR, data spine)

Medical history, prescriptions and immunisations can be checked via the SCR, covering 96% of people in England*:



*<https://www.pharmaceuticaljournal.com/20204180.article>

Comparison of 2015 and 2018 audit results: key outcomes

	2015 (% of age 50+)	2018 (%)	Target
VL measured*	91.8	97.2	90%*
Medications recorded	89.9	93.9	97%
CVD risk assessed	50.6	67.1	90%
BP recorded	87.5	91.8	90%
Smoking status recorded	67.8	80.4	90%

*Guidelines outcome changed: 2015 within 6 months (80%); 2018 within 9 months or 15 if on PI (90%).

Conclusion

- **Targets met**: VL, BP monitoring
- **Targets not met**: CVD risk assessment, smoking history, recording of co-medication
- Variable monitoring of other outcomes; generally better for adherence, laboratory measurements than for well-being, lifestyle

Conclusion, continued

- Significant rates of co-morbidity and poly-pharmacy, increasing with age
- Two thirds of audited individuals were aged 50-59
- Further ageing is expected to lead to increasing clinical complexity
- Generally good communication from HIV clinic *to* GP
- Low use of Summary Care Record – meaning clinics do not get information *from* GP

Recommendations

- Clinics to have agreed methods locally of achieving these minimum standards
- Use of proformas can help as prompt
- Set up electronic reminders with appointments for annual review
- Focus on:
 - CVD and bone assessment
 - Mood, memory and cognition review
 - Poly-pharmacy and DDI review
- Consult Summary Care Record or similar systems to check e.g. prescribed medications

Acknowledgements

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BHIVA Audit and Standards Sub-Committee: D Asboe, V Balasubramaniam, F Burns, D Chadwick (Chair), D Churchill, V Delpech, N Ekong, A Freedman, N Larbalestier, R Mbewe, N Naous, O Olarinde, E Ong, S Parry, C Sabin, A Sullivan, J Vera.
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