

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health and social care directorate

Quality standards and indicators

Briefing paper

Quality standard topic: HIV testing

Output: Prioritised quality improvement areas for development.

Date of Quality Standards Advisory Committee meeting: 20 January 2017

Contents

| | | |
|---|---|----|
| 1 | Introduction | 2 |
| 2 | Overview | 2 |
| 3 | Summary of suggestions | 6 |
| 4 | Suggested improvement areas | 8 |
| | Appendix 1: Review flowchart | 29 |
| | Appendix 2: Suggestions from stakeholder engagement exercise – registered stakeholders | 30 |

1 Introduction

This briefing paper presents a structured overview of potential quality improvement areas for HIV testing. It provides the committee with a basis for discussing and prioritising quality improvement areas for development into draft quality statements and measures for public consultation.

1.1 Structure

This briefing paper includes a brief description of the topic, a summary of each of the suggested quality improvement areas and supporting information.

If relevant, recommendations selected from the key development source below are included to help the committee in considering potential statements and measures.

1.2 Development source

The key development sources referenced in this briefing paper are:

[HIV testing: increasing uptake among people who may have undiagnosed HIV](#) Joint NICE and Public Health England guideline NG60 (2016). Next review December 2018.

[Sexually transmitted infections and under-18 conceptions: prevention](#) NICE public health guideline PH3 (2007).

2 Overview

2.1 Focus of quality standard

This quality standard will cover interventions to improve the uptake of HIV testing. It will include people who have not been diagnosed with HIV and:

- live in areas or communities with a high prevalence of HIV, or
- their lifestyle or sexual behaviour puts (or has put) them at risk, or
- have an illness that may be indicative of HIV infection.

2.2 Definition

HIV (human immunodeficiency virus) attacks the immune system, and weakens the person's ability to fight infections and disease. There is no cure for HIV, but there are treatments to enable most people with the virus to live a long and healthy life.

There are four main types of HIV test:

- A full blood test can give reliable results from 1 month after infection occurs.
- A point of care test (POCT) can be used in situations where it would be difficult to give people their results, for example if they are unwilling to leave contact details or if it is important to avoid a delay in obtaining a result. A POCT is where a sample of saliva or blood from a finger prick is taken and tested immediately. POCT have reduced specificity and sensitivity compared with fourth-generation laboratory tests and all positive results need to be confirmed by serological tests.
- Self-sampling is when a person takes a sample (saliva or blood from a finger prick), and sends it to a laboratory for testing and the results are provided by the service. They usually receive negative results by text message.
- Self-testing kits allow people to take a sample of saliva or blood from a finger prick and perform their own HIV test in a place of their own choosing and get an immediate result (typically within 15–20 minutes).

2.3 Incidence and prevalence

In 2015, an estimated 101,200 people (69,500 men and 31,600 women) in the UK were living with HIV. The overall HIV prevalence was 1.6 per 1,000 people aged 15 and over ([HIV in the UK](#) Public Health England).

Although there are significant pockets of HIV in other populations and communities, the most significant burden of HIV continues to be borne by men who have sex with men and by black Africans. An estimated 47,000 men living with HIV in the UK in 2015 had acquired their infection through sex with other men, an increase from 45,000 in 2014 and 43,000 in 2013. One in 20 men aged 15 to 44 who have sex with men is estimated to be living with HIV.

A recent increase in HIV testing coverage among men attending sexual health clinics is likely to be the reason for an increase in new diagnoses and a decline in undiagnosed infections: about 5,800 men who have sex with men were unaware of their infection in 2015, compared with 8,500 in 2010 ('HIV in the UK').

Almost 1 in 1,000 heterosexual people aged 15 to 44 in the UK is estimated to be living with HIV. Prevalence is higher in black African heterosexual women (1 in 22) and men (1 in 56), who together form the second largest group affected by HIV.

In 2015, 87% of people living with HIV in the UK were estimated to be aware of their HIV infection with 13,500 people estimated to be unaware of their infection ('HIV in the UK').

Public Health England carried out an analysis of 2014 data on diagnosed HIV prevalence distribution in local authorities in England (available via Public Health

England's [Sexual and Reproductive Health Profiles](#)). Based on this analysis, groups and communities at high prevalence of diagnosed HIV can be defined as follows:

- High prevalence: local authorities with a diagnosed HIV prevalence of between 2 and 5 per 1,000 people aged 15 to 59 years.
- Extremely high prevalence: local authorities with a diagnosed HIV prevalence of 5 or more per 1,000 people aged 15 to 59 years. In 2015, 20 local authorities in England were included in the extremely high diagnosed HIV prevalence band.

In England, 39% of adults newly diagnosed as living with HIV were diagnosed late in 2015. While the proportion and number diagnosed late has reduced from 56% in 2006, levels remain high ('HIV testing in England').

Late diagnosis remains a significant problem in heterosexual people: in 2015, 55% of men and 49% of women were newly diagnosed at a late stage of infection (over half of whom were black African) ('HIV in the UK').

Early diagnosis of HIV enables better treatment outcomes and reduces the risk of transmitting the infection to others. A late diagnosis for HIV means that a person has tested positive for HIV after the virus has already begun to damage their immune system. People whose infection is diagnosed late have a 10-fold increased risk of dying within the first year of diagnosis compared to those diagnosed early ([Leaving it late: why are people still dying from HIV in the UK?](#) Public Health England). Two-thirds of late HIV diagnoses occur in high-prevalence and extremely-high-prevalence local authorities in England.

There are significantly higher costs of care for people who are diagnosed late. This is largely due to increased inpatient hospital care costs due to a higher rate of hospital admissions and increased costs of therapy.

2.4 Management

In 2013, in response to the international AIDS epidemic, UNAIDS launched a new target known as '90-90-90' ([90-90-90: An ambitious treatment target to help end the AIDS epidemic](#) UNAIDS). By 2020:

- 90% of all people living with HIV will know their HIV status
- 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy
- 90% of all people receiving antiretroviral therapy will have viral suppression.

Services providing HIV testing are NHS hospital trusts, GP surgeries, sexual health services and third sector community testing services. The third sector plays an important role in HIV testing, particularly in terms of increasing its acceptability among some subpopulations.

The guideline committee identified that the uptake of HIV testing is generally high when testing is offered but that staff in healthcare settings may be reluctant to offer and recommend a test. It was acknowledged that there is pressure on healthcare professionals' time during appointments.

2.5 National outcome frameworks

Tables 1 and 2 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

Table 1 [Public health outcomes framework for England, 2016–2019](#)

| Domain | Objectives and indicators |
|---------------------|--|
| 3 Health protection | <p>Objective</p> <p>The population's health is protected from major incidents and other threats, whilst reducing health inequalities</p> <p>Indicators</p> <p>3.04 People presenting with HIV at a late stage of infection</p> |

Table 2 [NHS outcomes framework 2016–17](#)

| Domain | Overarching indicators and improvement areas |
|--|--|
| 1 Preventing people from dying prematurely | <p>Overarching indicators</p> <p>1b Life expectancy at 75</p> <p>i Males ii Females</p> |
| 2 Enhancing quality of life for people with long-term conditions | <p>Overarching indicator</p> <p>2 Health-related quality of life for people with long-term conditions**</p> |

| | |
|--|---|
| <p>4 Ensuring that people have a positive experience of care</p> | <p>Overarching indicators 4a Patient experience of primary care i GP services 4b Patient experience of hospital care 4c <i>Friends and family test</i> 4d <i>Patient experience characterised as poor or worse</i> I <i>Primary care</i> ii <i>Hospital care</i> Improvement areas Improving people’s experience of outpatient care 4.1 Patient experience of outpatient services Improving people’s experience of accident and emergency services 4.3 Patient experience of A&E services</p> |
| <p>Alignment with Adult Social Care Outcomes Framework and/or Public Health Outcomes Framework ** Indicator is complementary Indicators in italics in development</p> | |

3 Summary of suggestions

3.1 Responses

In total 18 stakeholders responded to the 2-week engagement exercise 21/11/16 – 5/12/16.

Stakeholders were asked to suggest up to 5 areas for quality improvement. Specialist committee members were also invited to provide suggestions. The responses have been merged and summarised in table 3 for further consideration by the Committee.

Some stakeholders did not provide areas for quality improvement but provided comments on the recently published guideline or provided additional background information to support development of the quality standard.

Full details of all the suggestions provided are given in appendix 2 and 3 for information.

Table 3 Summary of suggested quality improvement areas

| Suggested area for improvement | Stakeholders |
|---|--|
| Offering and recommending HIV testing in healthcare settings <ul style="list-style-type: none"> • General • Specialist sexual health services • Secondary and emergency care • GP surgeries | <ul style="list-style-type: none"> • NCD, NLGBTP, RCN, SCMs • SCM • BASHH, RCGP, SCMs • BASHH, RDL, RCGP, SCMs |
| Offering and recommending HIV testing in community settings <ul style="list-style-type: none"> • Community settings • Point of care testing • Self-sampling • Digital and social media | <ul style="list-style-type: none"> • BASHH, RDL, SCM • NLGBTP, RDL, SCMs • SCMs • NCD, SCM |
| Increasing opportunities for HIV testing <ul style="list-style-type: none"> • Regular testing • Follow-up testing • Partner notification | <ul style="list-style-type: none"> • NCD, SCM • SCM • SCMs |
| Referral to an HIV specialist | <ul style="list-style-type: none"> • NCD, SCM |
| Additional areas <ul style="list-style-type: none"> • Prisons • Testing platforms • Serious incident reporting • National awareness campaign • Collaborative commissioning • Integrated sexual health approach | <ul style="list-style-type: none"> • SCM • SCM • SCM • BASHH • BASHH • NLGBTP |
| BASHH, British Association for Sexual Health and HIV NCD, National Clinical Director NLGBTP, The National LGB&T Partnership RCGP, Royal College of GPs RCN, Royal College of Nursing RDL, Renaissance at Drugline Lancashire SCM, Specialist Committee Member | |

3.2 Identification of current practice evidence

Bibliographic databases were searched to identify examples of current practice in UK health and social care settings; 916 papers were identified for HIV testing. In addition, 15 papers were suggested by stakeholders at topic engagement and 10 papers internally at project scoping.

Of these papers, 11 have been included in this report and are included in the current practice sections where relevant. Appendix 1 outlines the search process.

4 Suggested improvement areas

4.1 *Offering and recommending HIV testing in healthcare settings*

4.1.1 Summary of suggestions

Stakeholders suggested that there is a need to encourage HIV testing in a wide range of settings to ensure early diagnosis. Improving access to testing for high risk groups was highlighted as a priority, with a need to ensure that there is an inclusive approach in mainstream testing services.

Specialist sexual health services

It was suggested that there is a need to increase HIV testing among people who attend specialist sexual health clinics, and in particular, among black African women, whose HIV positivity rates are 18 times higher than other women attendees.

Secondary and emergency care

There was a concern about variation in practice in HIV testing in secondary and emergency care and a lack of data collection. It was suggested that it should be a priority to offer and recommend HIV testing to:

- those admitted to hospital, including emergency departments, in high and extremely high prevalence areas who are having a blood test for another reason
- everyone admitted to hospital, including emergency departments, in extremely high prevalence areas
- people presenting with an indicator condition
- people diagnosed with hepatitis B or C.

GP surgeries

It was highlighted that current practice in HIV testing in GP surgeries is highly variable, funding is inconsistent and there is a need for new practice models to be developed. Particular priorities were identified as:

- offer and recommend HIV testing to people who register with practices in areas of high and extremely high prevalence
- offer and recommend HIV testing to those having a blood test for another reason in areas of high and extremely high prevalence

- offer and recommend HIV testing to people presenting with an indicator condition
- consider the need to offer HIV testing at every consultation in areas of extremely high prevalence
- Use of spot tests as a screening tool.

4.1.2 Selected recommendations from development source

Table 4 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 4 to help inform the committee’s discussion.

Table 4 Specific areas for quality improvement

| Suggested quality improvement area | Suggested source guidance recommendations |
|---|---|
| Specialist sexual health services | Specialist sexual health services (including genitourinary medicine) NICE NG60 Recommendation 1.1.2 |
| Secondary and emergency care | Secondary and emergency care NICE NG60 Recommendations 1.1.4 to 1.1.7 |
| GP surgeries | GP surgeries NICE NG60 Recommendations 1.1.8 to 1.1.10 and 1.1.12 |

Offering and recommending HIV testing in different settings

Specialist sexual health services (including genitourinary medicine)

NICE NG60 Recommendation 1.1.2

Offer and recommend an HIV test to everyone who attends for testing or treatment.

Secondary and emergency care

NICE NG60 Recommendation 1.1.4

Routinely offer and recommend an HIV test to everyone attending their first appointment (followed by repeat testing in line with recommendation 1.2.6) at drug dependency programmes, termination of pregnancy services, and services providing treatment for:

- hepatitis B
- hepatitis C

CONFIDENTIAL

- lymphoma
- tuberculosis.

NICE NG60 Recommendation 1.1.5

In all areas, offer and recommend HIV testing on admission to hospital, including emergency departments, to everyone who has not previously been diagnosed with HIV and who:

- has symptoms that may indicate HIV or HIV is part of the differential diagnosis (for example, infectious mononucleosis-like syndrome), in line with HIV in Europe's [HIV in indicator conditions](#).

NICE NG60 Recommendation 1.1.6

In areas of high and extremely high prevalence, also offer and recommend HIV testing on admission to hospital, including emergency departments, to everyone who has not previously been diagnosed with HIV and who is undergoing blood tests for another reason.

NICE NG60 Recommendation 1.1.7

Additionally, in areas of extremely high prevalence, offer and recommend HIV testing on admission to hospital, including emergency departments, to everyone who has not previously been diagnosed with HIV.

GP surgeries

NICE NG60 Recommendation 1.1.8

In all areas, offer and recommend HIV testing to everyone who has not previously been diagnosed with HIV and who:

- has symptoms that may indicate HIV or HIV is part of the differential diagnosis (for example, infectious mononucleosis-like syndrome), in line with HIV in Europe's [HIV in indicator conditions](#).

NICE NG60 Recommendation 1.1.9

In areas of high and extremely high prevalence, also offer and recommend HIV testing to everyone who has not previously been diagnosed with HIV and who:

- registers with the practice or
- is undergoing blood tests for another reason and has not had an HIV test in the previous year.

NICE NG60 Recommendation 1.1.10

Additionally, in areas of extremely high prevalence, consider HIV testing opportunistically at each consultation (whether bloods are being taken for another reason or not), based on clinical judgement.

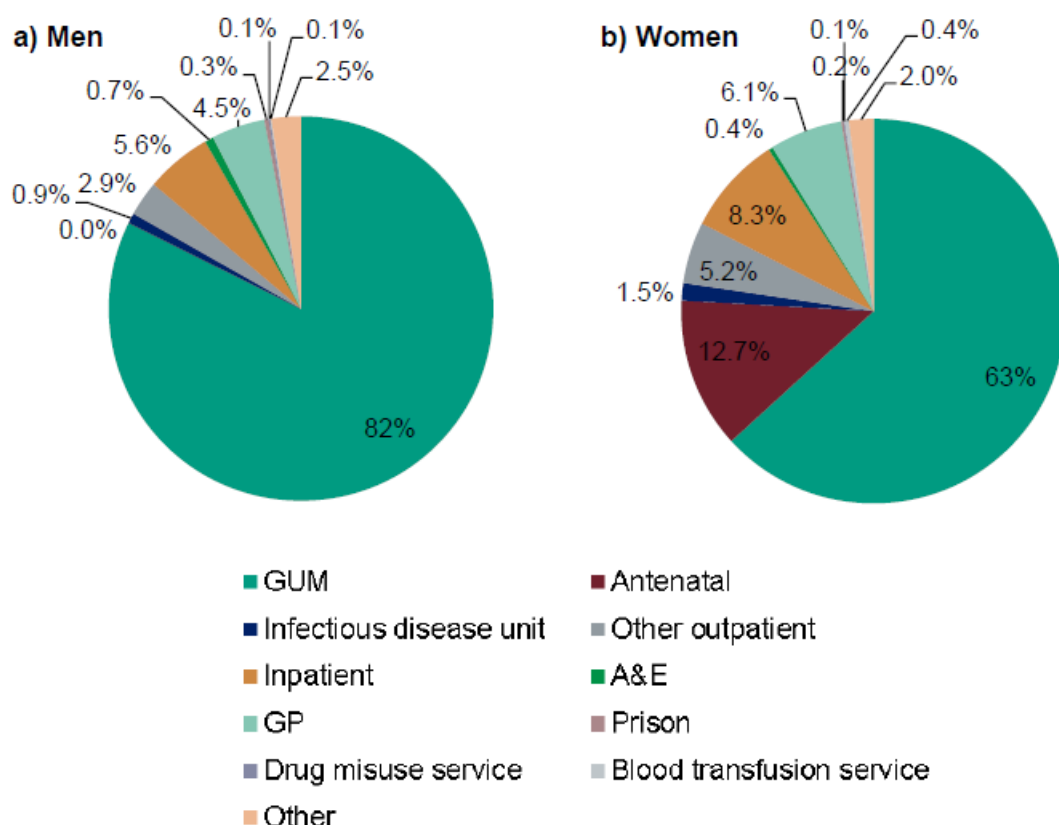
NICE NG60 Recommendation 1.1.12

If a venous blood sample is declined, offer a less invasive form of specimen collection, such as a mouth swab or finger-prick.

4.1.3 Current UK practice

The HIV testing in England 2016 report¹ indicates that most diagnoses of HIV in adults are made in in genitourinary medicine (GUM) clinics, followed by antenatal services (women), hospital wards (inpatient admissions) and in general practice as shown in Figure 1.

Figure 1: New diagnoses among adult men and women (over 15) by setting of diagnosis



¹ [HIV testing in England: 2016 report](#) Public Health England

A systematic review of published data on HIV testing levels² following publication of the 2008 UK HIV testing guidelines concluded that adherence to national guidelines outside of GUM/SH and antenatal clinics was poor. The overall pooled estimate of HIV test coverage across all settings was 27.2%. This was marginally higher in patients tested in settings where routine testing is recommended (29.5%) than in those patients with clinical indicator diseases (22.4%). Analysis suggested that the low overall level of testing is likely to be due to low levels of provider test offer and not patient acceptance. The review was based on a relatively small number of local audits and studies that included a wide variety of populations, settings, duration and methods used for measuring HIV testing.

The British HIV Association (BHIVA) 2010 National Audit³ assessed the impact of the 2008 UK HIV testing guidelines on HIV care in the UK. An online survey to assess local testing policy and practice found that HIV testing was offered routinely to antenatal patients and those attending GUM services but it was less routine in other services. It was not being offered routinely to patients attending tuberculosis, viral hepatitis, drug dependency and termination of pregnancy services and was only offered selectively in A&E, acute medical admission units and medical outpatient departments.

Specialist sexual health services

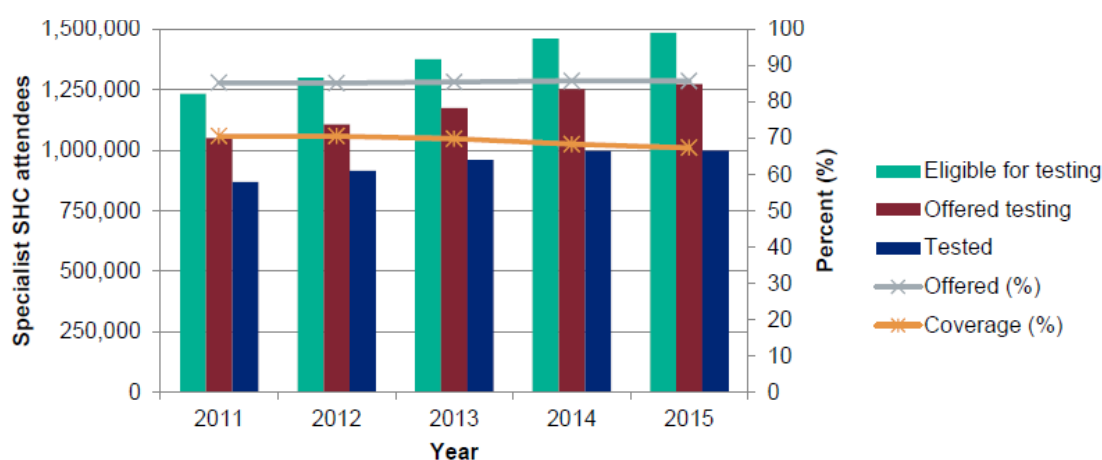
The Public Health England HIV testing in England report⁴ indicates that 86% of eligible people attending a specialist sexual health service in 2015 were offered an HIV test and 67% were tested. Analysis of the GUM clinic activity dataset indicates that 92% of gay/bisexual and heterosexual male attendees were offered an HIV test, while the offer was lower for lesbian/bisexual and heterosexual female attendees (88% and 84%, respectively). HIV test coverage was highest in gay/bisexual men (88%) and heterosexual men (77%) and lower in lesbian/bisexual (69%) and heterosexual females (61%). Only 66% of black African female attendees received an HIV test in 2015.

² [Low levels of HIV test coverage in clinical settings in the UK: a systematic review of adherence to 2008 guidelines](#) Elmahdi et al Sex Transm Infect 2014;90:119–124. doi:10.1136/sextrans-2013-051312

³ [A survey of HIV care in the UK: Results of BHIVA National Audit 2010](#) Ellis et al International Journal of STD & AIDS 2013; 24:329-331

⁴ [HIV testing in England: 2016 report](#) Public Health England

Figure 2: HIV test offer and coverage in specialist SHC attendees eligible for HIV testing, England 2011-2015



¹ eligible specialist SHC attendee: any patient attending a specialist SHC at least once during a calendar year; patients known to be HIV positive or for whom an HIV test was not appropriate, or for whom the attendance was reported as being related to SRH care only are excluded; includes England residents only

Secondary and emergency care

The 2016 HIV testing in England report⁵ indicates that 45.5% of people testing positive for hepatitis B and 45.4% of people testing positive for hepatitis C between 2010 and 2014 were tested for HIV on the same day or within 6 months of their positive result. This is based on data captured by the Sentinel Surveillance of Blood Borne Virus Testing (SSBBV) (participating laboratories cover approximately 40% of England's population) linked to the national HIV and AIDS Reporting System.

In 2015, the SSBBV showed that 63,878 people were tested for HIV in secondary care and 3,378 in emergency departments.

An audit of HIV testing⁶ was carried out for adult admissions to a hospital in a high HIV prevalence area (the Homerton University Hospital Acute Care Unit) following the introduction of an opt-out HIV testing policy between January and April 2014. This found that 24.3% of admissions had an HIV test with higher testing rates for <60 year olds, Black or British Africans, those presenting with symptoms suggestive of a clinical indicator condition and medical admissions. The study concluded that the opt-out policy needed to be reinforced across all specialities, particularly surgery.

A survey of sexual health commissioners in high HIV prevalence areas⁷ carried out in 2012 found that only 5 out of 35 PCTs that responded had commissioned routine testing of general medical admissions in a hospital covering their area. The most

⁵ [HIV testing in England: 2016 report](#) Public Health England

⁶ [Audit of HIV testing in a multispecialty acute admissions unit in a London general hospital](#) Mody et al Sex Transm Infect 2016;92:239 doi:10.1136/sextrans-2015-052458

⁷ [Expanded HIV testing in high-prevalence areas in England: results of a 2012 audit of sexual health commissioners](#) Hartney et al HIV Medicine Vol 15. Issue 4. April 2014 p251-254

common hospital setting for routine untargeted testing was in emergency departments (9 out of 35 PCTs), followed by general admissions (6 out of 35) and medical assessment units (6 out of 35). In 2 PCTs testing was limited to people in high risk groups only.

An audit carried out at a hospital in Scotland in 2012⁸ found that 36% of 174 medical inpatients had a current HIV indicator condition but only 11% of those patients had been tested for HIV.

GP surgeries

The HIV Testing in England report⁹ indicates that general practices in extremely high prevalence areas carried out the highest number of tests per practice population (86/10,000), double the coverage rate in high prevalence areas (44/10,000) and ten times the coverage rate in low prevalence areas (9/10,000). This is based on data from general practices that submit data to the SSBBV (covering approximately 35% of England's general practice population).

A survey of GPs attending the RCGP conferences in 2012, 2013, 2014 and 2015¹⁰ concluded that many GPs do not know their local HIV prevalence. The most recent survey also showed that there are still some GPs who are unaware of recommendations within key national HIV testing guidance. Time and time-related issues, such as the belief that counselling is needed, can prevent GPs offering a test. GPs feel there is a need for greater public awareness, increased use of patient education materials, and more routine HIV testing throughout primary care.

The 2012 online survey of sexual health commissioners in high HIV prevalence areas¹¹ found that only 11 out of 35 PCTs that responded had commissioned routine testing of new registrants in general practice, however, only a small minority of practices were participating in this. Testing was limited to people in high-risk groups in 7 out of 35 PCTs. HIV testing was included as part of a programme of broader opportunistic sexually transmitted infection screening in general practice in 6 out of 35 PCTs.

A retrospective case note review of 339 patients diagnosed with HIV in Glasgow between 2008 and 2011¹² found that 26% had at least one documented clinical indicator condition prior to HIV diagnosis and 24% had prior contact with at least one speciality, most commonly primary care. Patients were often reviewed by medical

⁸ [HIV testing in Lanarkshire](#) Acquah, Baggott, McGoldrick, Kennedy J R Coll Physicians Edinb 2014; 44: 278–82

⁹ [HIV testing in England: 2016 report](#) Public Health England

¹⁰ [An investigation into General Practitioner perceptions on HIV testing in England 2012–2016: a review](#) Martinez et al Poster presented at 2016 Annual RCGP Primary Care Conference.

¹¹ [Expanded HIV testing in high-prevalence areas in England: results of a 2012 audit of sexual health commissioners](#) Hartney et al HIV Medicine Vol 15. Issue 4. April 2014 p251-254

¹² Missed opportunities for HIV diagnosis; a three-year audit in the West of Scotland Brawley et al Scottish Medical Journal 58(3) 173-177

services on multiple occasions, with a significant number having unnecessary investigations and in some cases invasive procedures prior to an HIV test.

4.1.4 Resource impact assessment

The average cost of an HIV test in secondary and primary care is assumed to be around £7 per test (this does not include a cost for practitioner time because the number of practitioners is not expected to increase).

Increasing the number of people tested will increase the number of people with a positive diagnosis. The cost of the increased number of tests and treatment costs for the additional positive diagnoses will be offset by savings from treating people earlier rather than late or very late. There will also be savings from a reduction in the number of people with HIV as a result of onward transmission.

Table 5 below shows example scenarios of the possible effects of increasing the number of tests in secondary and emergency care and GP surgeries at a national level and in areas of extremely high prevalence. It assumes that 0.72 cases of HIV are prevented by each diagnosis (HIV Medicine British HIV Association).

Table 5 Additional people diagnosed and potential onward transmissions prevented as a result of increased testing

| Percentage increase in the number of tests in secondary and emergency care and GP surgeries | Additional number of tests annually | Resource impact (£) | Additional people diagnosed | Potential transmissions avoided (0.72%) |
|---|-------------------------------------|---------------------|-----------------------------|---|
| 10% | 10,920 | 71,200 | 22 | 16 |
| In areas of extremely high prevalence | | | | |
| 100% | 17,978 | 120,100 | 90 | 65 |

Each new case of HIV infection is estimated to represent between £280,000 and £360,000 in lifetime costs. Early diagnosis may stop people from unknowingly passing on the infection. If 1% of the 5,200 cases diagnosed in 2014 had been prevented, between £15 and £19 million lifetime treatment and clinical care costs would have been saved.

4.2 *Offering and recommending HIV testing in community settings*

4.2.1 Summary of suggestions

Community settings

It was suggested that there is a need to ensure that HIV testing is available via a variety of community settings, including promotion via public sex environments, in order to encourage access among particular at risk groups who may not use mainstream HIV testing services. There was some concern that a lack of funding has led to a reduction in testing in community settings.

Point-of-care testing

Stakeholders suggested that there should be increased opportunities for point-of-care testing (POCT), in particular in community settings and in areas of high and extremely high prevalence. This was seen as an important way to overcome some of the barriers that prevent people accessing mainstream HIV testing services. Ensuring the quality of POCT carried out by non-clinical providers was highlighted as a priority. There was some concern that commissioners can be reluctant to commission POCT services, particularly when tests are carried out by lay testers.

Self-sampling

Encouraging the use of self-sampling was suggested as a priority. As the person does not need to meet a healthcare professional, it can help to overcome some of the barriers to HIV testing.

Digital and social media

Stakeholders highlighted the potential for using digital and social media to promote HIV testing. Geospatial apps, which can advertise HIV testing to geographically located service users, were felt to be particularly helpful to support outreach work with specific groups. The importance of ensuring the quality and accuracy of digital applications that promote safer sex behaviours to reduce STIs was also highlighted.

4.2.2 Selected recommendations from development source

Table 6 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 6 to help inform the committee's discussion.

Table 6 Specific areas for quality improvement

| Suggested quality improvement area | Selected source guidance recommendations |
|---|--|
| Community settings | Offering and recommending HIV testing in different settings NICE NG60 Recommendation 1.1.14 Promoting awareness and uptake of HIV testing NICE NG60 Recommendation 1.3.3 |
| Point-of-care testing | Offering and recommending HIV testing in different settings NICE NG60 Recommendation 1.1.17 Increasing opportunities for HIV testing NICE NG60 Recommendation 1.2.1 and 1.2.2 |
| Self-sampling | Offering and recommending HIV testing in different settings NICE NG60 Recommendation 1.1.16 Increasing opportunities for HIV testing NICE NG60 Recommendation 1.2.3 and 1.2.4 |
| Digital and social media | Promoting awareness and uptake of HIV testing NICE NG60 Recommendation 1.3.8 |

Offering and recommending HIV testing in different settings

NICE NG60 Recommendation 1.1.14

Providers of community testing services (including outreach and detached services) should set up testing services in:

- areas with a high prevalence or extremely high prevalence of HIV, using venues such as pharmacies or voluntary sector premises (for example, those of faith groups)
- venues where there may be high-risk sexual behaviour, for example public sex environments, or where people at high risk may gather, such as nightclubs, saunas and festivals.

NICE NG60 Recommendation 1.1.16

Ensure that people who decline or are unable to consent to a test are offered information about other local testing services, including self-sampling. See [making decisions using NICE guidelines](#) for more information about consent.

NICE NG60 Recommendation 1.1.17

Ensure that lay testers delivering tests are competent to do so and have access to clinical advice and supervision.

Increasing opportunities for HIV testing

NICE NG60 Recommendation 1.2.1

Offer point-of-care testing (POCT) in situations where it would be difficult to give people their results, for example if they are unwilling to leave contact details.

NICE NG60 Recommendation 1.2.2

Explain to people at the time of their test about the specificity and sensitivity of the POCT being used and that confirmatory serological testing will be needed if the test is reactive.

NICE NG60 Recommendation 1.2.3

Consider providing self-sampling kits to people in groups and communities with a high rate of HIV (see recommendation 1.1.1).

NICE NG60 Recommendation 1.2.4

Ensure that people know how to get their own self-sampling kits, for example, by providing details of websites to order them from.

Promoting awareness and uptake of HIV testing

NICE NG60 Recommendation 1.3.3

Ensure interventions to increase the uptake of HIV testing are hosted by, or advertised at, venues that encourage or facilitate sex (such as some saunas, websites, or geospatial apps that allow people to find sexual partners in their proximity). This should be in addition to general community-based HIV health promotion.

NICE NG60 Recommendation 1.3.8

Consider a range of approaches to promote HIV testing, including:

- local media campaigns
- digital media, such as educational videos
- social media, such as online social networking, dating and geospatial apps

- printed materials, such as information leaflets.

4.2.3 Current UK practice

Community settings and point-of-care testing

The 2012 online survey of sexual health commissioners in high HIV prevalence areas¹³ found that 18 out of 45 PCTs had commissioned community testing via outreach programmes carried out by charities and voluntary sector organisations. Community testing settings included saunas, polyclinics, pharmacies, prisons, churches and health centres. Point of care testing alone was used in the majority of community settings.

Self-sampling

The HIV Testing in the UK report¹⁴ indicates that Public Health England and participating local authorities launched a nationwide HIV self-sampling service aimed at those most at risk in November 2015. 35,647 self-sampling kits were delivered between November 2015 and September 2016 with 51% returned for testing. Of all users tested 32% reported never having been tested for HIV before.

Digital and social media

No published studies on current practice were found for this suggested area for quality improvement.

4.2.4 Resource impact assessment

During production of the NICE guideline on [HIV testing: increasing uptake among people who may have undiagnosed HIV](#), the committee agreed that self-sampling showed great promise and that there were likely to be economies of scale. They thought it may be more cost efficient for some local authorities to commission online self-sampling services such as the one provided by Public Health England. However, as self-sampling is a relatively new modality in the UK there is limited evidence around its cost effectiveness.

¹³ [Expanded HIV testing in high-prevalence areas in England: results of a 2012 audit of sexual health commissioners](#) Hartney et al HIV Medicine Vol 15. Issue 4. April 2014 p251-254

¹⁴ [HIV testing in England: 2016 report](#) Public Health England

4.3 *Increasing opportunities for HIV testing*

4.3.1 Summary of suggestions

Regular testing

Stakeholders highlighted the importance of regular HIV testing for particular groups who are at high risk of exposure to HIV.

Follow-up testing

It was suggested that it is important to highlight that those who have tested negative but who may have been exposed to HIV may need a follow-up test to re-check after a certain period.

Partner notification

Partner notification was highlighted as an important component of HIV testing which can be underutilised. It is important because it is an effective approach to identifying infection due to the high positivity rate in this group. It was highlighted that this should be a priority for all providers including community services. A stakeholder highlighted evidence that suggests that even in specialist sexual health clinics partner notification test coverage varies.

4.3.2 Selected recommendations from development source

Table 7 below highlights recommendations that have been provisionally selected from the development sources that may support potential statement development. These are presented in full after table 7 to help inform the committee’s discussion.

Table 7 Specific areas for quality improvement

| Suggested quality improvement area | Selected source guidance recommendations |
|---|---|
| Regular testing | Offering and recommending HIV testing in different settings NICE NG60 Recommendation 1.1.11 Increasing opportunities for HIV testing NICE NG60 Recommendation 1.2.6 |
| Follow-up testing | Increasing opportunities for HIV testing NICE NG60 Recommendation 1.2.5 |
| Partner notification | Increasing opportunities for HIV testing NICE NG60 Recommendation 1.2.9 Sexually transmitted infections and under-18 conceptions: prevention NICE PH3 Recommendation 3 |

Offering and recommending HIV testing in different settings

NICE NG60 Recommendation 1.1.11

Offer and recommend repeat testing to the people in recommendations 1.1.8 to 1.1.9 in line with recommendation 1.2.6.

Increasing opportunities for HIV testing

NICE NG60 Recommendation 1.2.5

When giving results to people who have tested negative but who may have been exposed to HIV recently, recommend that they have another test once they are past the window period.

NICE NG60 Recommendation 1.2.6

Recommend annual testing to people in groups or communities with a high rate of HIV, and more frequently if they are at high risk of exposure (in line with Public Health England's HIV in the UK: situation report 2015). For example:

- men who have sex with men should have HIV and sexually transmitted infection tests at least annually, and every 3 months if they are having unprotected sex with new or casual partners
- black African men and women should have an HIV test and regular HIV and sexually transmitted infection tests if having unprotected sex with new or casual partners.

NICE NG60 Recommendation 1.2.9

Partners of people who test positive should receive a prompt offer and recommendation of an HIV test through partner notification procedures.

Sexually transmitted infections and under-18 conceptions: prevention

NICE PH3 Recommendation 3

Who is the target population?

Patients with an STI

Who should take action?

- Health professionals working in general practice, GUM and community health services (including community contraceptive services), voluntary and community organisations and school clinics. (However, they may need to refer the patient to a specialist.)

- Specialists with responsibility for helping to contact, test and treat partners of patients with an STI (partner notification). They may be sexual health advisers, general practitioners (GPs) or practice nurses providing enhanced sexual health services, chlamydia screening coordinators or GUM clinicians.

What action should they take?

- Help patients with an STI to get their partners tested and treated (partner notification), when necessary. This support should be tailored to meet the patient's individual needs.
- If necessary, refer patients to a specialist with responsibility for partner notification. (Partner notification may be undertaken by the health professional or by the patient.)
- Provide the patient and their partners with infection-specific information, including advice about possible re-infection. For chlamydia infection, also consider providing a home sampling kit.

4.3.3 Current UK practice

Regular testing

A study of HIV testing frequency¹⁵ among 2409 UK men who have sex with men (MSM) in Edinburgh, Glasgow and London estimated that 54.9% test annually. Only 26.7% of men who reported higher risk unprotected anal intercourse had had at least four tests in the last 2 years. 56.7% of those who had an HIV test were tested as part of a regular sexual health check and 35.5% tested following a risk event.

A policy audit of sexual health clinics in England in 2011¹⁶ found that all MSM attending sexual health clinics had an average of 1.6 tests per year regardless of risk.

Follow-up testing

The policy audit of sexual health clinics in England in 2011 found that almost all clinics invited MSM back for a repeat HIV test if they had reported a recent risk behaviour in the last 3 months in addition to the baseline test. Overall 19 of 23 clinics (83%) invited MSM back for the repeat HIV test within a 3-month period, 3/24 (12%) invited patients back 6 months later and 1/24 (4%) invited patients back after a year.

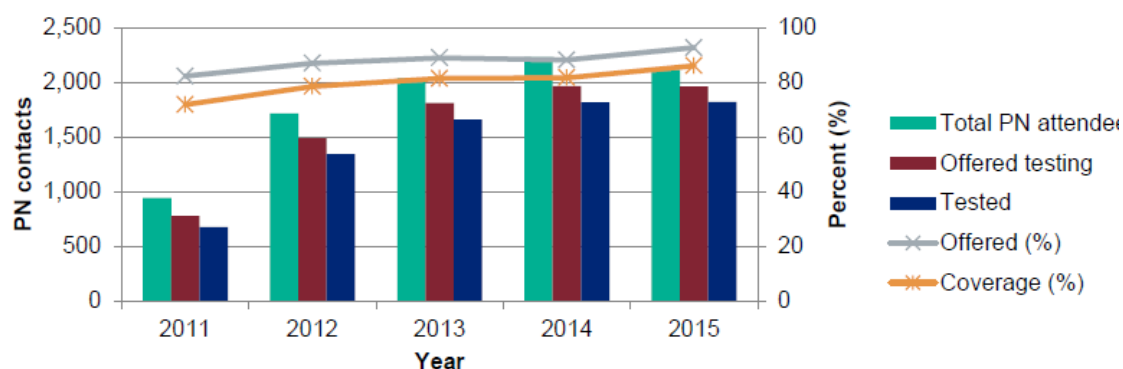
¹⁵ [Frequency of HIV testing among gay and bisexual men in the UK: implications for HIV prevention](#) McDaid et al HIV medicine Volume 17, Issue 9 October 2016 pages 683–693

¹⁶ [Audit of HIV testing frequency and behavioural interventions for men who have sex with men: policy and practice in sexual health clinics in England](#) Desai et al Sex Transm Infect 2013;89:404-408 doi:10.1136/sextrans-2012-050679

Partner notification

The HIV Testing in England report¹⁷ indicates that 2,116 people attended specialist sexual health clinics (SHCs) in 2015 because they had been told that they had a sexual partner with HIV. The number of people attending specialist SHCs as a result of HIV partner notification more than doubled between 2011 and 2014, but then fell by 5% in 2015. 93% of people attending as a result of partner notification were offered an HIV test and 86% were tested.

Figure 3: Partner notification contacts offered an HIV test and tested for HIV in specialist SHCs, England 2012-2015



¹ includes all service users (England and non-England residents)

The partner notification test ratio is the number of people tested following HIV partner notification divided by the number of new HIV diagnoses. This measure reflects the overall process of a sexual contact being identified by someone diagnosed with HIV, then attending a specialist SHC, being offered and then receiving an HIV test. The table below shows considerable variation in this ratio in areas with different HIV prevalence.

¹⁷ [HIV testing in England: 2016 report](#) Public Health England

Table 8: HIV test offer, testing and diagnosis in HIV partner notification contacts attending specialist SHCs by clinic diagnosed HIV prevalence band, England 2015

| Diagnosed HIV prevalence band ¹ | 2015 new diagnoses ^{2,3} | PN contacts ³ | Offered (offered %) | Tested (coverage %) | Contacts diagnosed (%) ⁴ | PN test ratio ⁵ |
|--|-----------------------------------|--------------------------|---------------------|---------------------|-------------------------------------|----------------------------|
| Low (<2/1,000) | 821 | 616 | 599 (97.2) | 567 (92.0) | 23 (4.1) | 0.7 |
| High (2-5/1,000) | 723 | 1,071 | 967 (90.3) | 904 (84.4) | 39 (4.3) | 1.3 |
| Extremely high (≥5/1,000) | 1,408 | 429 | 395 (92.1) | 350 (81.6) | 35 (10.0) | 0.2 |
| Total | 2,952 | 2,116 | 1,961 (92.7) | 1,821 (86.1) | 97 (5.3) | 0.6 |

¹ based on 2015 diagnosed HIV prevalence data; banding by clinic local authority

² all new diagnoses (excluding diagnoses made outside SHCs) in all service users (England and non-England residents)

³ includes all service users (England and non-England residents)

⁴ no. of diagnoses through PN (not shown)/no. of PN contacts tested (x100); 97 new diagnoses through PN

⁵ testing ratio: no PN contacts tested to number of 2015 new diagnoses

A joint BASHH & BHIVA audit of partner notification¹⁸ for patients newly diagnosed with HIV infection in 2011 in 169 HIV services (156 GUM) found that partner notification was not done or not documented in 12.4% of cases and estimated that 31% of partners were not informed. The audit identified that partner notification completion was substantially higher for regular sexual partners than ex-regular or known casual ones and estimated that one in three possibly HIV-positive contactable contacts may have remained undiagnosed.

4.3.4 Resource impact assessment

This area was not included in the resource impact assessment for NG60. It was not identified as an area that would have a significant resource impact (>£1m in England each year). However, savings can be made if people are diagnosed earlier. The cost of treatment per annum when HIV is diagnosed early is around £14,000 per case compared to £28,000 for late diagnosis.

¹⁸ [Joint BHIVA/BASHH audit of partner notification for patients with newly diagnosed HIV infection](#)
BHIVA Autumn conference 2013

4.4 Referral to an HIV specialist

4.4.1 Summary of suggestions

Stakeholders highlighted the importance of ensuring that people who test positive for HIV are referred quickly and efficiently to an HIV specialist. It was reported that current performance in this area is good but there was a concern that this may be more difficult to maintain with more testing sites. Ensuring that reporting of tests carried out in the community is included in surveillance systems was also identified as a priority.

4.4.2 Selected recommendations from development source

Table 8 below highlights recommendation that has been provisionally selected from the development source that may support potential statement development. This is presented in full after table 8 to help inform the committee’s discussion.

Table 9 Specific areas for quality improvement

| Suggested quality improvement area | Selected source guidance recommendations |
|---|---|
| Referral to an HIV specialist | Reducing barriers to HIV testing NICE NG60 Recommendation 1.4.3 |

Reducing barriers to HIV testing

NICE NG60 Recommendation 1.4.3

Ensure practitioners delivering HIV tests (including those delivering outreach POCT) have clear referral pathways available for people with both positive and negative test results, including to sexual health services, behavioural and health promotion services, HIV services and confirmatory serological testing, if needed. These pathways should ensure the following:

- People who test positive are seen by an HIV specialist preferably within 48 hours, certainly within 2 weeks of receiving the result (in line with UK national guidelines for HIV testing 2008). They should also be given information about their diagnosis and local support groups.
- Practitioners in the voluntary or statutory sector can refer people from HIV prevention and health promotion services into services that offer HIV testing and vice versa.

4.4.3 Current UK practice

The HIV in the UK 2016 report¹⁹ indicates that in 2015, 75% (3,856/5,149) of people had a baseline CD4 count (conducted as part of initial assessment and therefore used as a proxy for linkage to care) within two weeks, 86% (4,426/5,149) within one month and almost all (97%; 4,981/5149) within three months of HIV diagnosis. Linkage to care was high across almost all demographics and exposure categories, with the exception of people who acquired HIV through injecting of drugs where three quarters (76%; 115/151) were linked to care within a month, compared with 86% (4,311/4,998) among all other exposure groups.

4.4.4 Resource impact Assessment

This area was not included in the resource impact assessment for NG60. It was not identified as an area that would have a significant resource impact (>£1m in England each year).

¹⁹ [HIV in the UK: 2016 report](#) Public Health England

4.5 Additional areas

Summary of suggestions

The improvement areas below were suggested as part of the stakeholder engagement exercise. However they were felt to be either unsuitable for development as quality statements, outside the remit of this particular quality standard referral or require further discussion by the committee to establish potential for statement development.

There will be an opportunity for the committee to discuss these areas at the end of the session on 20 January 2017.

Prisons

A stakeholder suggested that as there is a higher prevalence of HIV in people in prison it is important to encourage HIV testing in this group. This area will be included in a separate quality standard on the physical health of people in prisons which is currently in development.

Testing platforms

A suggestion was made that it would be helpful to clarify which HIV testing platform is most appropriate in each healthcare setting and why. The purpose of this quality standard is not to assess the diagnostic accuracy of different types of HIV test. This area is also not included within the development source (NG60).

Serious incident reporting

There was a suggestion that incidents of late diagnosis in areas of extremely high and high HIV prevalence should be investigated to identify missed opportunities to diagnose HIV infection earlier so that learning can improve practice. Instead of progression as a quality statement this could be an outcome measure to assess success of interventions to increase testing in healthcare and community settings.

National awareness campaign

A stakeholder highlighted that a national awareness campaign could help by raising awareness among people who do not consider themselves to be at risk. Quality standards are focussed on actions that can be implemented at a local level.

Collaborative commissioning

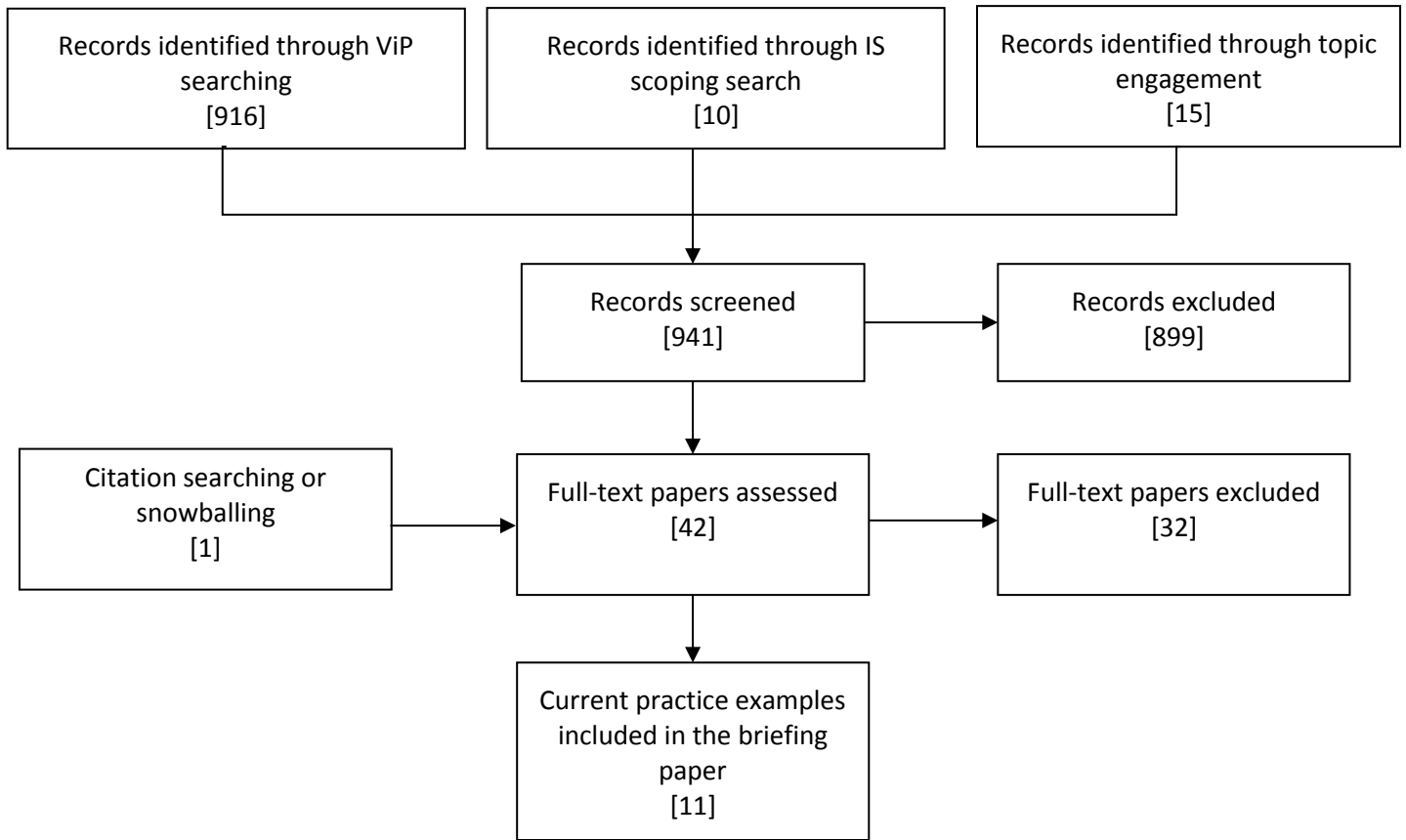
A collaborative approach to the commissioning of HIV services across all settings involving local authorities, clinical commissioning groups and NHS England was

suggested as a priority. Quality standards do not usually include statements on the approach to commissioning. This area is not included in the development source (NG60).

Integrated sexual health approach

Stakeholders highlighted that HIV testing is part of a wider approach to preventing HIV and improving sexual health. As such, HIV testing needs to be integrated with other approaches such as condom distribution schemes, needle exchanges and providing sexual health advice and information. It was suggested that improvements in the approach to sexual health, including HIV testing, are needed in primary care in particular, and that education and training for GP's could help. These issues will be covered in a future quality standard on sexual health across the life course.

Appendix 1: Review flowchart



Appendix 2: Suggestions from stakeholder engagement exercise – registered stakeholders

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----------------|----------------|-------------|--|------------------------|---|------------------------|
| General | | | | | | |
| 1 | 3.1 | BASHH | Key area for quality improvement 1 | | In the equality assessment, point 1, I suggest adding 'individuals from marginalised communities are at disproportionate risk of HIV; testing services & strategies will need to consider barriers to testing including stigma' | |
| 2 | 3.1 | BASHH | Key area for quality improvement 2 | SECTION 3.1 | <p>Needs to specify OR of the topic overview and remove 'workers' from 'migrant workers' within the impact assessment document.</p> <p>Population and topic to be covered" in the overview states:</p> <p>This quality standard will cover interventions to improve the uptake of HIV testing. It will include people who have not been diagnosed with HIV and:</p> <ul style="list-style-type: none"> • who live in areas or communities with a high prevalence of HIV • whose lifestyle or sexual behaviour puts (or has put) them at risk • who have an illness that may be indicative of HIV infection. <p>This could do with an "or" or a "at least one of" otherwise it might suggest you need to fit all three categories</p> | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|---------------------------------|---|--|---|------------------------|
| 3 | 3.1 | BASHH | Additional developmental areas of emergent practice | Have not referenced the BHIVA/BASHH UK National Guidelines for HIV Testing (2008) in the source guidance. | | |
| 4 | 3.1 | British HIV Association (BHIVA) | Additional developmental areas of emergent practice | <p>The guideline is comprehensive, evidence-based and appropriate and BHIVA congratulates the writing group on its work</p> <p>In the discussion they state that the 2008 UK National HIV Testing guidelines were NICE accredited. BHIVA did not its NICE accreditation until after the testing guidelines were produced so this is not correct.</p> <p>The tables in the last section comparing the old PH33 and 34 could be interpreted as meaning that patients in high prevalence areas should also have at least one other indication to prompt a test, when in fact the guidance correctly suggests otherwise.</p> | | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|--|---|---|---|
| | | | | <p>BHIVA welcomes the new guidance on high and extremely high prevalence areas, adjusted for the much lower undiagnosed prevalence since 2008 when the original guidance was written. This will enable testing resources to be focused and targeted on those communities where testing for undiagnosed HIV is most effective.</p> | | |
| 5 | 3.1 | MSD | MSD fully supports this process and welcomes initiatives to increase the uptake of testing. | | | |
| 6 | 3.1 | NHS England | <p>Key area for quality improvement</p> <p>Clinical effectiveness evidence for testing by population group outlined in scope</p> | <p>To achieve the most effective implementation of the proposed standards by commissioners and providers, reference to high quality evidence for the effectiveness of testing within the scoped sub groups is required.</p> | <p>Based on recent reports on testing and the HIV pathway.</p> <p>Targeted versus universal approaches can sometimes raise more implementation hurdles. Effectiveness data is required to enable the most consistent implementation, especially where discretionary investment is required.</p> | <p>No specific data identified. Recommend full literature review.</p> |
| 7 | 3.1 | NHS England | <p>Key area for quality improvement</p> | <p>Whilst the proposed groups to be covered within the guidance are appropriate, attention will need to be given to clear definitions to</p> | <p>Based on recent reports on testing and the HIV pathway, lack of clarity of definition appears to be a common theme.</p> | <p>No specific data identified. Recommend full literature review.</p> |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|--|--|--|---|
| | | | Evidence for descriptors of scoped populations | <p>determine when the standard does and doesn't apply</p> <ul style="list-style-type: none"> • who live in areas or communities with a high prevalence of HIV • whose lifestyle or sexual behaviour puts (or has put) them at risk • who have an illness that may be indicative of HIV infection. | | |
| 8 | 3.1 | NHS England | <p>Key area for quality improvement</p> <p>Evidence for testing by setting</p> | <p>Whilst the proposed groups to be covered within the guidance are appropriate, attention will need to be given to clear definitions and directions with regard to testing within different settings, including the evidence to support this.</p> | <p>Based on recent reports on testing and the HIV pathway.</p> | <p>No specific data identified. Recommend full literature review.</p> |
| 9 | 3.1 | NHS England | <p>Key area for quality improvement</p> <p>Cost effectiveness calculations for the above</p> | <p>To achieve the most effective implementation of the proposed standards by commissioners and providers, reference to high quality evidence for the cost effectiveness of testing within</p> | <p>Based on recent reports on testing and the HIV pathway.</p> <p>Targeted versus universal approaches can sometimes raise more implementation hurdles. Consideration of costs is required to enable the most consistent implementation,</p> | <p>No specific data identified. Recommend full literature review.</p> |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|---|----------------|-------------------------------|---|---|--|---|
| | | | | the scoped sub groups is required. | especially where discretionary investment is required. | |
| 10 | 3.1 | NHS Greater Glasgow and Clyde | <p>I wanted to make you aware of the attached work in progress which is timed to conclude in March 2017 and may be of interest for those involved in developing the standard.</p> <p>Please feel free to get in touch if any further information would be useful.</p> | | | <p>Proposal provided on 'Development of a social marketing/mass media intervention to increase HIV testing for gay & bisexual men and all MSM in Greater Glasgow & Clyde: Evidence synthesis and component analysis'</p> <p>Lisa McDaid (MRC/CSO Social and Public Health Sciences Unit, University of Glasgow), Nicky Coia (NHS Greater Glasgow and Clyde), Paul Flowers (Glasgow Caledonian University)</p> |
| 11 | 3.1 | RCP | We would like to endorse the response submitted by the BASHH. | | | |
| 12 | 3.1 | SCM1 | Additional evidence sources for consideration | HIV in Europe's Guidelines on HIV testing in Indicator Conditions, HIDES papers | | |
| Offering and recommending HIV testing in healthcare settings | | | | | | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|--|--|--|---|--|
| 13 | 4.1 | NHS England (National Clinical Director) | Safety netting | Capturing patients that may be undiagnosed and encouraging testing and informing about transmission | <p>HIV testing currently occurs in the following differing ways/settings:</p> <ul style="list-style-type: none"> • Self-testing by patients • Self-sampling by patients • POCT testing in clinics, outreach, GUM network • Laboratory testing and confirmatory testing • Resistance testing <p>It is imperative that a quality standard:</p> <ul style="list-style-type: none"> • Is applicable to all areas of testing • Contains reference to resistance testing that may influence treatment • Contains minimum standards for testing in all settings • Contains minimum standards for staff training for accurate testing <p>Treatment, resistance monitoring, testing methods and standards (QA, EQA, IQA).</p> | <p>EQA schemes are in use nationally provided by companies such as QCMD and UK NEQAS for microbiology, including laboratory and POCT.</p> <p>Rumbwere Dube et al., 2016 (Syst Rev. 2016 Sep 20;5(1):158) are undertaking a systematic review on predictors of human immunodeficiency virus (HIV) infection in primary care to identify and consolidate existing scientific evidence on characteristics of HIV infected individuals that could be used to inform decision-making in prognostic model development.</p> |
| 14 | 4.1 | The National LGB&T Partnership | <p>Key area for quality improvement 1 –</p> <p>To ensure that all identified high risk groups have</p> | The new NICE guideline on ‘HIV testing: increasing uptake among people who may have undiagnosed HIV guideline’ defines high risk | Evidence suggests there are groups who do not have equitable access to HIV prevention, testing, treatment and care due to marginalisation, norms and social and legal inequalities. | Scottish Transgender Alliance. 2008. Transgender Experience in Scotland research summary: Key research findings of the Scottish Transgender |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|--|---|--|--|
| | | | <p>sufficient and varied access to HIV testing opportunities</p> | <p>groups to be offered a HIV test as including:</p> <ul style="list-style-type: none"> • Male who discloses they have sex with men • Trans woman who has sex with men • Person who discloses high-risk sexual practices e.g. Chemsex • Person who discloses they are the sexual partner of someone known to be HIV positive, or at high risk of HIV (i.e. female sexual contacts of MSM). <p>There should be tailored initiatives offering HIV testing to specific groups at risk that are commissioned, designed and targeted to increase uptake of testing in the identified group. At the same time, steps should be taken to minimise the barriers that inhibit these groups from accessing mainstream HIV testing services, such as training staff to specifically work with the groups</p> | <p>In spite of this, some of the groups who are at highest risk of acquiring HIV are also those who face the greatest barriers to accessing testing services, and due to a lack of visibility or research are also omitted from HIV strategies. Two groups in particular are trans women and the sexual partners of people who are HIV positive or at high risk of HIV acquisition.</p> <p>Research suggests that groups at high risk, such as trans women, have poor experiences in sexual health services.</p> <p>The Scottish Transgender Alliance (2008) reported that trans people are aware that sexual health services generally consist of intimate physical examinations, and subsequently anticipate that as a trans person this could be distressing.</p> | <p>Alliance Survey of transgender people living in Scotland. Available from: http://www.scottishtrans.org/wp-content/uploads/2013/03/sta-experiencesummary03082.pdf</p> |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|--|---|---|------------------------|
| | | | | <p>discussed as high risk, and ensuring promotion uses inclusive language and imagery. Taking this dual approach will best ensure that people are able to access HIV tests when they need it.</p> <p>A potential problem is that a lack of demographic data evidencing the prevalence and presence of these groups could mean that their needs and interests aren't considered within mainstream testing opportunities, or in the commissioning of community testing services. If voices aren't counted, then they don't count. For example, gender identity isn't monitored regularly in sexual health clinics. This means that a local authority, as the likely commissioner of HIV testing services, are less likely to recognise the need to target HIV testing services for trans women.</p> | | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|--|--|--|--|
| | | | | Local authorities should be encouraged to use anecdotal evidence as well as information by a local trans or LGBT (lesbian, gay, bisexual and trans) organisation to identify the need when designing testing services that are inclusive and genuinely meet the need of potential service users. | | |
| 15 | 4.1 | RCN | Key area for quality improvement 1 Encouraging health providers to test for HIV | NICE guidance recommends that people should be offered and recommended HIV testing in different settings including hospitals, sexual health clinics, GP surgeries, prisons, community settings etc. | We are however, aware that in practice particularly in dealing with late diagnosis HIV patients, healthcare providers seem reluctant to do so, with the evidence supporting the fact that Healthcare Workers can be over protective and paternalistic (BASHH 2016) Patients have sometimes presented with what would be considered high risk issues relating to HIV infection. This is despite there being national guidance in place since 2008 (BHIVA, BASHH, British Infection Society 2008). | NICE NG60: HIV testing: increasing uptake among people who may have undiagnosed HIV (Joint NICE and Public Health England guideline) https://www.nice.org.uk/guidance/ng60 |
| 16 | 4.1 | SCM1 | Stage of HIV infection at diagnosis: CD4 count at diagnosis | Better individual health outcomes – reduced morbidity and mortality (10 times more likely to die in first year if diagnosed late), better | PHO relating to reducing late diagnosis | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|--|----------------|-------------|--|---|---|------------------------|
| | | | | treatment response and reduced onward transmission | | |
| 17 | 4.1 | SCM1 | Stage of HIV infection at diagnosis: RITA result at diagnosis | Would represent very early diagnosis, especially if symptomatic/infectious mono like syndrome | PHO relating to reducing late diagnosis (and need it to allow for exclusions for above measure) | |
| Specialist sexual health services | | | | | | |
| 18 | 4.1 | SCM3 | Key area for quality improvement 2 Improving HIV testing among black African women attending specialist sexual health clinics (including GUM clinics that are integrated with reproductive health services) | Women attending specialist sexual health clinics were less likely to be offered (82%) or to receive (59%) an HIV test than men (90% and 78%, respectively). These lower rates include black African women whose HIV positivity rates were 18 times higher than other women attendees (1.8% vs. 0.1%). While just 4% of female sexual health clinic attendees were black African, 42% of HIV diagnoses among female attendees were in this group. HIV test positivity rates among black African women were three times higher (1.8%) in low prevalence areas than in extremely high prevalence areas (0.6%). | Only 66% of black African female attendees received an HIV test, yet positivity rates in this group (0.9%) were higher than in black African heterosexual males (0.7%), 82% of whom were tested for HIV | As above |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|-------------------------------------|----------------|-------------|---|---|--|--|
| 19 | 4.1 | SCM3 | Key area for quality improvement 3 Specialist sexual health clinics should increase HIV testing among all attendees. | In England, HIV infection rates are highest among gay/bisexual men and black Africans. Rates are also high among people born in high prevalence countries. We should improve testing levels in these groups when they attend specialist sexual health services. | HIV test coverage among eligible people attending specialist sexual health clinics in England was 67%. This low coverage level meant that 16,271 black Africans, 14,548 people born in high prevalence countries and 13,381 gay/bisexual men attended a specialist sexual health clinic but did not receive an HIV test. | As above |
| Secondary and emergency care | | | | | | |
| 20 | 4.1 | BASHH | Key area for quality improvement 2 | Testing in secondary care/ED - will need support re staffing, pathway development etc; the recommendation to test in TB clinics requires a clear recommendation for HIV testing in the NICE TB guidelines too, some testing could be automated e.g all mononucleosis screens (applies to primary care also) | See above | |
| 21 | 4.1 | RCGP | Secondary care: Offer and recommend HIV testing on admission to hospital, including emergency departments who lives in an area of | Since 2008, HIV testing has been recommended in all general medical admissions in areas of high prevalence (>2 per 1000), however the implementation of the guideline is variable throughout the country and | There have been several hospitals that have implemented this policy to some success for example Accident and Emergency at Guys and St Thomas Hospital in the last year and for medical admissions at the Central Manchester University Hospital, Royal | Please see the annual national Public Health England HIV report which include diagnoses, late diagnoses and numbers accessing treatment. Late diagnosis and people living with undiagnosed HIV |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|--|---|--|--|
| | | | <p>high prevalence of HIV and is undergoing blood tests for another reason</p> | <p>this is evident as nearly one in five people are unaware of their HIV diagnosis as well nearly 40% presenting as late diagnosis.</p> | <p>Victoria Infirmary in Newcastle and University Hospitals Leicester.</p> <p>Although there has been success with high uptake of tests (up to 90%[i],[ii] and diagnoses of HIV (ranging 0.5%-1% of tests)[iii], one of the main challenges was clinicians not offering the test despite the guidelines[iv] and argued for the need for training for healthcare workers to overcome this barrier.</p> <p>i Ong K et al. Estimated cost per HIV infection diagnosed through routine HIV testing offered in acute general medical admission units and general practice settings in England. HIV Med. 2016 Apr;17(4):247-54. doi: 10.1111/hiv.12293.</p> <p>ii Phillips D et al. Short report: Implementation of a routine HIV testing policy in an acute medical setting in a UK general hospital: a cross-sectional study. Sex Transm Infect 2014;90:3 185-187</p> <p>iii Palfreeman A , Nyatsanza F , Farn H et al. HIV testing for acute medical admissions: evaluation of a pilot study in Leicester, England . Sex Transm Infect 2013 ; 89 : 308 – 10 .</p> | <p>demonstrated failure of robust HIV policies.</p> <p>https://www.gov.uk/government/collections/hiv-surveillance-data-and-management</p> <p>Also please see the BHIVA national audit “Survey and audit of "look back" reviews of previous health service use among late-diagnosed individuals.”</p> <p>http://www.bhiva.org/NationalAuditSchedule.aspx</p> |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|--|--|---|---|
| | | | | | iv Ellis S , Graham L , Price DA , Ong ELC . Offering HIV testing in an acute medical admissions unit in Newcastle upon Tyne . Clin Med 2011 ; 11 : 541 – 3 . doi: 10.7861/clinmedicine.11-6-541 | |
| 22 | 4.1 | SCM1 | Offer and uptake of an HIV test to individuals presenting to secondary care (ED, AMU etc) in areas of high (having venepuncture) and extremely high (all) prevalence | High proportion of late diagnoses in the UK, with very good outcomes once diagnosed. Low rates of HIV test offer and uptake in individuals presenting to these settings, very few programmes currently running in UK, despite previous NICE guidelines. Majority of transmission involves those who remain undiagnosed. High rates of reported missed opportunities (in health care settings) in those newly diagnosed | Poor/variable implementation of some aspects of previous NICE guidelines relating to this | HINTS paper, PHE report on DH pilots, abstracts from various Conferences on pilots, giving cost effective positivity rates (>1/1000) of testing programmes in these settings. |
| 23 | 4.1 | SCM1 | Offer and uptake of an HIV test to individuals presenting with an Indicator Condition | High proportion of late diagnoses in the UK, with very good outcomes once diagnosed. Low rates of HIV test offer and uptake in individuals presenting with indicator conditions. Majority of transmission involves | Although in a number of GLs, very variable performance in different settings and in different parts of the country. Improvement in performance should have a significant impact on both individual and public health, and overall costs to the healthcare system. | HIDES results, including audit data. BHIVA audit on new diagnoses. |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|---|--|---|------------------------|
| | | | | those who remain undiagnosed. High rates of reported missed opportunities (in health care settings) in those newly diagnosed. | | |
| 24 | 4.1 | SCM3 | Key area for quality improvement 4 Improve testing among people admitted to hospital, especially in extremely high prevalence areas. | HIV testing in hospitals in England has been assessed within emergency departments and other secondary care departments. HIV positivity rates in emergency departments were (1.4%), and in other secondary care departments were (0.8%). | There is currently no national data on HIV testing coverage in hospital departments. This analysis should be available next year, but will not be comprehensive (this is based on sentinel surveillance). However, these data could be collected locally. | As above |
| 25 | 4.1 | SCM3 | Key Area for quality improvement Improve testing among people presenting with a HIV indicator disease | HIV positivity in studies among persons presenting with a HIV indicator disease are high. (>1%). | There is currently no national data on HIV testing coverage in hospital departments. However, these data could be collected locally. | As above |
| 26 | 4.1 | SCM3 | Additional developmental areas of emergent practice HIV testing should improve for patients with hepatitis B and hepatitis C | The HIV positivity rates among people diagnosed with hepatitis C was 1.9% and among those diagnosed with hepatitis B was 2.4% | Less than half of patients diagnosed with hepatitis B and hepatitis C are tested for HIV within six months of their diagnoses. | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|---------------------|----------------|------------------------------------|---|--|---|------------------------|
| GP surgeries | | | | | | |
| 27 | 4.1 | BASHH | Key area for quality improvement 1 | Testing in primary care particularly recommendation 1.1.9 - requires audit of offer rates and consideration of HIV-focused LES and DES payments which are SUSTAINED | We know that those with previously undiagnosed HIV are highly likely to have attended health services in the preceding 12 months before diagnosis | |
| 28 | 4.1 | Renaissance at Drugline Lancashire | <p>Additional developmental areas of emergent practice</p> <p>Increase uptake in heterosexuals to prevent late diagnosis due to increased numbers of heterosexual positive diagnoses</p> <p>Improve testing in primary care and GP settings</p> | <p>Due to the increasing number of heterosexuals receiving positive diagnoses, work should be undertaken to increase the uptake of HIV testing to this cohort, to reduce the number of late diagnosis and ensure timely referral to treatment. Testing provision should also be improved and increased in primary care and GP settings for this cohort of people.</p> <p>Sex Worker Outreach target testing facility for sex workers, most defining themselves as female heterosexual.</p> | <p>Various reasons why people won't get HIV tested with GP; including poor HIV training by GP's and patient fear of prejudice. Also fear of confidentiality, especially if linked to other 'risk'/ 'judged' behaviour or fear of test still impacting on mortgage/ insurance/ employment etc</p> <p>Thus need to target heterosexuals in community, not just GP e.g. offering as part of Harm Reduction/ Needle Exchange services for substance users including steroids (risks through sex and injecting).</p> | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|--|---|---|------------------------|
| | | | | <p>Transgender targeted testing facility for those defining as heterosexual.</p> <p>Targeting of 'swingers venues' for testing and safe sex information and advice.</p> <p>Use of a mobile testing and information vehicle (bus) at targeted venues and audiences, specifically kitted out with area for testing and space for displaying materials. Bus to visit areas of need in the community and also events and festivals.</p> | | |
| 29 | 4.1 | RCGP | Local Authorities to select, implement and evaluate a multifaceted intervention to improve HIV testing and sexual health care in general practice that is peer-led and tailored to local needs | See below | See below | See below |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|---|--|---|--|
| 30 | 4.1 | RCGP | <p>Primary care: Implementation of screening of new registrants: Nationally, one or two 'implementation packages' should be developed to introduce HIV testing of new registrants in general practice.</p> <p>These would not be solely 'paper': there should be active support of LAs, which they can opt to use, eg with training of local peers (eg a GP, practice nurses) to support implementation in their area.</p> <p>RCTs may not have been conducted and in any case may not be replicated in 'real life'. Interventions should also draw on implementation</p> | <p>Currently there is a scatter-gun approach with Local Authorities doing different things, and, often, failing.</p> <p>Need to support: a peer-developed and -led model standard approaches to evaluation (coding and recording is a challenge) development of a relevant holistic approach - mindful of other new registrant screening tests (when venous samples may be used) supply chains and quality of rapid tests, if used etc</p> | <p>See 2016 NICE HIV testing guidelines (and of course has been recommended in guidelines since 2008)</p> | <p>Re inconsistency and failure of LAs to implement new registrant screening: BBC journalist data collected from LAs (Faye Kirkland, personal share of data)</p> <p>[The RHIVA study should be supported to publish its cost-benefit evaluation of HIV screening of new registrants in Hackney and then we can see what can be learned from their implementation model].</p> |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|---|---|--|---|
| | | | science (including MRC complex intervention guidelines), non-RCT published evidence, educational theory, (and include peer experts in leadership). | | | |
| 31 | 4.1 | RCGP | Screening | Spot test now available as screening tool | Easy, accessible, cheap, effective, acts as education tool when reason explained, stigma overcome. | Recent paper from Hackney showing that screening all new GP patients gave earlier diagnoses and picked up acknowledged HIV. In Hackney screening is available on request. (JA) |
| 32 | 4.1 | SCM1 | Offer and uptake of an HIV test to individuals presenting to primary care in areas of high (having venepuncture) and extremely high (all; to be considered) prevalence. | As above | Poor/variable implementation of some aspects of previous NICE guidelines relating to this | HINTS paper, PHE report on DH pilots, abstracts from various Conferences on pilots. Also some evidence of education and training in primary care is effective in increasing testing level |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|---|--|--|---|
| 33 | 4.1 | SCM1 | Offer and uptake of an HIV test to individuals presenting with an Indicator Condition | High proportion of late diagnoses in the UK, with very good outcomes once diagnosed. Low rates of HIV test offer and uptake in individuals presenting with indicator conditions. Majority of transmission involves those who remain undiagnosed. High rates of reported missed opportunities (in health care settings) in those newly diagnosed. | Although in a number of GLs, very variable performance in different settings and in different parts of the country. Improvement in performance should have a significant impact on both individual and public health, and overall costs to the healthcare system. | HIDES results, including audit data. BHIVA audit on new diagnoses. |
| 34 | 4.1 | SCM3 | Key area for quality improvement 5 general practices should test patients for HIV, especially in extremely high prevalence areas. | In extremely high prevalence areas, 0.5% of HIV tests were positive compared with 0.4% in high prevalence areas and 0.2% in low prevalence areas. | HIV testing levels in general practices in extremely high diagnosed HIV prevalence areas (86/10,000) are nearly double that of high diagnosed HIV prevalence areas (44/10,000). In low prevalence areas only 9/10,000 of the general practice population are tested for HIV. | As above |
| 35 | 4.1 | SCM4 | HIV testing in General Practice | General Practice covers the largest number of the general population in regards to their health needs and "footfall". It is universally accepted that increasing HIV testing in practice would reduce the number of people living with undiagnosed HIV and also help to reduce stigma. | Although testing in General Practice is increasing, it still represents a relatively small proportion of HIV tests taken. This is due in part to lack of time, lack of knowledge from GPs about how to offer testing and stigma. There is also a wide variation in between practices as to the amount of testing undertaken. It is shown that promoting testing in practices and offering some training and support does increase testing. | Unlocking the potential: longitudinal audit finds multifaceted education for general practice increases HIV testing and diagnosis Timesh D Pillay,1 Judith Mullineux,2 Colette J Smith,3 Philippa Matthews2,4Sex |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|--|----------------|------------------------------------|--|---|--|--|
| | | | | | There are areas of extremely high HIV prevalence where this approach could be targeted. | Transm Infect 2013;89:191–196. Posters GP Perceptions HIV testing (attached). |
| Offering and recommending HIV testing in community settings | | | | | | |
| Community settings | | | | | | |
| 36 | 4.2 | BASHH | Key area for quality improvement 3 | Community testing | Lack of funding has led to the closure of many community organisations and loss of community nurse/HCSW posts; the community recommendation requires financial and structural support | |
| 37 | 4.2 | Renaissance at Drugline Lancashire | Additional developmental areas of emergent practice Increase uptake in heterosexuals to prevent late diagnosis due to increased numbers of heterosexual positive diagnoses Improve testing in primary care and GP settings | Due to the increasing number of heterosexuals receiving positive diagnoses, work should be undertaken to increase the uptake of HIV testing to this cohort, to reduce the number of late diagnosis and ensure timely referral to treatment. Testing provision should also be improved and increased in primary care and GP settings for this cohort of people. Sex Worker Outreach target testing facility for sex | Various reasons why people won't get HIV tested with GP; including poor HIV training by GP's and patient fear of prejudice. Also fear of confidentiality, especially if linked to other 'risk'/ 'judged' behaviour or fear of test still impacting on mortgage/ insurance/ employment etc Thus need to target heterosexuals in community, not just GP e.g. offering as part of Harm Reduction/ Needle Exchange services for substance users including steroids (risks through sex and injecting). | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|---|--|--|---|
| | | | | <p>workers, most defining themselves as female heterosexual.</p> <p>Transgender targeted testing facility for those defining as heterosexual.</p> <p>Targeting of 'swingers venues' for testing and safe sex information and advice.</p> <p>Use of a mobile testing and information vehicle (bus) at targeted venues and audiences, specifically kitted out with area for testing and space for displaying materials. Bus to visit areas of need in the community and also events and festivals.</p> | | |
| 38 | 4.2 | SCM5 | Key area for quality improvement 1: Offering and recommending HIV testing in different settings | Community Settings especially in areas with high or extremely high prevalence as recommended within NICE Guidance | Will enable some of the hard to reach groups to access testing | Use Public Health England's sexual and reproductive health profiles |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|------------------------------|----------------|------------------------------------|---|--|---|---|
| 39 | 4.2 | Renaissance at Drugline Lancashire | <p>Key area for quality improvement 2</p> <p>Engagement in Public Sex Environments</p> | <p>Engagement in Public Sex Environments is recommended within NICE Guidance. This should be considered as advertisement of testing services, conversations around safe sex and home testing kits can be discussed in situ. Condoms can also be given at the same time the conversations are taking place.</p> | <p>We have found that engagement in public sex environments means we can engage with people who would not necessarily access the service at other times. Home testing kits and condoms can be given out at point of conversation plus advertisement of service offer.</p> | |
| Point-of-care testing | | | | | | |
| 40 | 4.2 | The National LGB&T Partnership | <p>Key area for quality improvement 3</p> <p>Increase opportunities for HIV testing in community settings</p> | <p>We agree with the recent 'HIV testing: increasing uptake among people who may have undiagnosed HIV' guideline that there must be an increase in opportunities for HIV testing. In particular, point-of-care testing (POCT) should be made more available and accessible, particularly in community settings such as at voluntary sector organisation premises in areas of high or extremely high prevalence. For example, LGBT Foundation</p> | <p>Commissioners of HIV testing services can be reluctant to commission POCT services, particular when conducted by lay testers. However, the benefits as highlighted in the NICE 'HIV testing: increasing uptake among people who may have undiagnosed HIV' guideline is that this greatly increases opportunities for HIV testing in community settings. Venues such as community settings, religious centres and voluntary sector organisations can break down some of the barriers that stop people accessing mainstream testing opportunities.</p> | <p>Broeckaert and Challacombe et al, 2015. 'Rapid point-of-care HIV testing: A review of the evidence'. http://www.catie.ca/en/pif/spring-2015/rapid-point-care-hiv-testing-review-evidence</p> <p>BHIVA, HIV Testing guidelines, 2008</p> |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|------------------------------------|---|--|---|--|
| | | | | provide POCT for Men who have sex with men (MSM) at two sites; in their premises in Canal Street, Manchester, and the other in a university sites in Salford, which is known to have high numbers of MSM living in the region and a HIV prevalence rate generally. | | |
| 41 | 4.2 | Renaissance at Drugline Lancashire | Key area for quality improvement Outreach Testing | Outreach testing is recommended within NICE Guidance. Outreach Point of Care Testing should be considered in environments such as saunas, where someone may have the test while it is being conveniently offered. Referral can then be made straight to the sexual health clinic for those people with a reactive result, so there is no delay in receiving treatment and support. | In Blackpool, we have found a good uptake of people wanting a point of care test within a sauna environment. Workers can then accompany the person being tested to the sexual health clinic that day if a reactive result is received, to ensure no delay in confirming the result and receiving treatment. | |
| 42 | 4.2 | SCM2 | HIV Testing for non-statutory/ non-clinical providers/organisations | non-clinical providers who deliver or wish to deliver point of care testing for HIV. In particular, practical guidance on: | Commissioners need to be assured that HIV tests are being delivered to agreed quality standards | We believe that current guidance relates to NHS/Clinical organisations and that guidance for non-clinical or non-statutory organisations would be useful |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|---|---|---|------------------------|
| | | | | <ul style="list-style-type: none"> - clinical governance and the arrangements that need to be in place - competencies for people involved in administering the test and verifying / delivering the results etc - practical issues such as insurance, occupational immunisations etc | | |
| 43 | 4.2 | SCM4 | Use of POCT | <p>POCT has evolved over the last few years and now offers a cost effective, reliable and acceptable method of testing which gives immediate results. Although it should not be the only method offered and needs confirmation by serological testing – it is a useful option in areas of high and extremely high prevalence. It also offers the opportunity for lay testing in community and in clinical environments.</p> | <p>POCT increases the “offer” for HIV testing. It is less invasive and gives an immediate result. It may also help to reduce stigma of testing.</p> | NICE guidance |
| 44 | 4.2 | SCM5 | Key area for quality improvement 2 Increase | Offer point-of- care- testing | Especially where it would be difficult to give people their results | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|---------------------------------|----------------|--|--|---|---|---|
| | | | opportunities for HIV testing | | | |
| Self-sampling | | | | | | |
| 45 | 4.2 | SCM4 | Increasing Self Sampling | Self-sampling allows people to test without involving a face to face meeting with a HCP thereby helping to reduce stigma. | Preliminary results from Terence Higgins Trust and PHE have been encouraging regarding their acceptability with MSM. There is current research looking at the acceptability within other communities. | Nice Guidance Other data from THT and PHE not yet published. |
| 46 | 4.2 | SCM5 | Key area for quality improvement 3 Increase opportunities for HIV testing | Self-sampling | Ensure that people know where to get their own self-sampling kits | |
| Digital and social media | | | | | | |
| 47 | 4.2 | NHS England (National Clinical Director) | SMS & digital app use | Marked variation has been documented in content, quality and accuracy of available mobile apps for STIs, with some containing potentially harmful information (Gibbs et al., 2016 Sex Transm Infect. 2016 Nov 24) | SMS interventions can increase uptake of sexual health services and STI testing. Require further assessment as to whether interventions delivered by mobile phone can alter safer sex behaviours to reduce STIs (Burns et al., 2016 BMC Public Health. 2016 Aug 12;16(1):778) | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|---|----------------|--|---|---|---|---|
| 48 | 4.2 | Renaissance at Drugline Lancashire | Key area for quality improvement 3 Netreach provision on websites and apps | Netreach provision should be considered on relevant web pages and also smart phone apps for example Grindr, to advertise service offer and testing to geographically located service users. | We have found that by utilising netreach provision we are able to advertise service provision to people who would not necessarily be aware of our offer. The geographic nature of apps also allows for outreach workers to visit places where MSM are meeting in public sex environments to offer outreach provision. | |
| 49 | 4.2 | SCM4 | Promotion of HIV testing to general public | Offering tests is one way to increase testing but creating a demand for tests by an educated public would enhance this approach. | The power of advertising is well known and many people still associate HIV with the “tombstone” adverts of the 1990’s. There are also many new mediums for communication with groups such as social media and data apps. | Nice Guidance |
| Increasing opportunities for HIV testing | | | | | | |
| Annual testing | | | | | | |
| 50 | 4.3 | NHS England (National Clinical Director) | Monitoring positive patients and those at risk of becoming positive | even when using self-testing and self-sampling where possible (active surveillance) | | |
| 51 | 4.3 | SCM5 | Key area for quality improvement 4: Increase opportunities for HIV testing | Repeat testing | Recommend annual testing for people in groups or communities with a high risk of HIV, and more frequently if they are at high risk of exposure | In line with Public Health England’s HIV in the UK: situation report 2015 |
| Follow-up testing | | | | | | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|-----------------------------|----------------|-------------|--|---|--|--|
| 52 | 4.3 | SCM5 | Key area for quality improvement 4: Increase opportunities for HIV testing | Repeat testing | Especially when giving results when tested negative but who may have been exposed to HIV. | In line with Public Health England's HIV in the UK: situation report 2015 |
| Partner notification | | | | | | |
| 53 | 4.3 | SCM2 | Relationship to HIV diagnosis and PN | Agreed protocols/pathways would enable this process to be clarified – especially in relation to non-clinical/non-statutory providers as outlined above | PN is a crucial but often overlooked/underutilised component of HIV testing – emphasising this component would enable commissioners and providers to monitor this to agreed standards | PN is a crucial component of HIV diagnosis which often identifies HIV infection – this is an effective second line of HIV diagnosis, but without clear guidance on how this should be done. |
| 54 | 4.3 | SCM3 | Key area for quality improvement 1 Improving HIV partner notification in specialist sexual health clinics (SHC) | 5% of people who attended a specialist SHCs because of HIV partner notification, tested positive for HIV. This is the highest positivity rate of all testing activities in England. | While all people attending SHCs following HIV partner notification should be tested, testing rates and positivity vary between prevalence band areas (see Table 20). Test coverage was lowest (82%) among people attending through HIV partner notification in SHCs in extremely high prevalence areas, even though these attendees had the highest positivity rate (10%). The partner notification test ratio is the number of people tested following HIV partner notification divided by the number of new HIV diagnoses. This measure reflects the overall process of a sexual contact being identified by someone diagnosed with HIV, then | PHE published its first HIV testing report in December 2016. This report contains to support the key areas in this comment. https://www.gov.uk/guidance/hiv-testing |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|--------------------------------------|----------------|--|--|--|--|------------------------|
| | | | | | attending a specialist SHC, being offered and then receiving an HIV test. The overall HIV PN test ratio for England is 0.6, ranging between 0.2 in extremely high prevalence areas to 1.3 in high prevalence areas. | |
| Referral to an HIV specialist | | | | | | |
| 55 | 4.4 | SCM1 | Successful and timely transfer to treatment and care | Expanding sites where testing and diagnosis takes place increases chance of non-receipt of positive result, delayed transfer to care and potentially loss to follow up | Currently UK performance is high but this would be a measure to ensure this is maintained with increased number and variety of testing settings. Also need to consider how community testing by lay testers would report into the surveillance systems and achieve similar performance | PHE report |
| 56 | 4.4 | NHS England (National Clinical Director) | Clinical management of confirmed positive patients and those awaiting confirmation | | | |
| 57 | 4.4 | NHS England (National Clinical Director) | Access to specialists and specialised services | | | |
| Additional areas | | | | | | |
| Prisons | | | | | | |
| 58 | 4.5 | SCM4 | HIV Testing in Prisons | There is little data for this as there has not been much research but it is accepted that people in prisons have a higher prevalence of HIV and | There is little data on this and this is a population who could be easily reached and offered HIV testing. | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|------------------------------------|----------------|-------------|---|--|---|---|
| | | | | are amenable to health interventions. | | |
| Testing platforms | | | | | | |
| 58 | 4.5 | SCM2 | The HIV test recommended for A&E, General Medical Admissions and Primary Care | Guidance is needed to help commissioners and service providers ascertain the most appropriate test in this setting and why. | The recent updated NICE guidance calls for greater testing in all three settings, it would be helpful to have the different testing platforms assessed to guide commissioner and service providers to the most appropriate test | There is a wealth of supporting information available about each testing platform, but I don't believe these have been systematically reviewed. |
| Serious incident reporting | | | | | | |
| 60 | 4.5 | SCM2 | HIV Testing and the relationship to SI investigations | We believe that in areas of extremely-high and high HIV prevalence that routine Serious Incident reporting should be included in any quality standards | This should be explored fully | Previous investigations have high-lighted 'missed opportunities' to diagnose HIV infection earlier – the learning is crucial to improve HIV detection rates |
| National awareness campaign | | | | | | |
| 61 | 4.5 | BASHH | Key area for quality improvement 4 | Awareness: we are long overdue a national TV, radio, poster & social media campaigns | Many people still consider themselves to not be at risk and these groups can be hard to reach and may represent an undiagnosed fraction of HIV that can present late | |
| Collaborative commissioning | | | | | | |
| 62 | 4.5 | BASHH | Key area for quality improvement 5 | Commissioning: testing in all settings recommended by NICE requires commissioning by LAs, CCGs and NHSE | There needs to be a collaborative approach which again will require support | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|--|----------------|--------------------------------|--|---|---|------------------------|
| Integrated sexual health approach | | | | | | |
| 63 | 4.5 | The National LGB&T Partnership | <p>Key area for quality improvement 2</p> <p>HIV testing sites to also promote a combined approach</p> | <p>We agree with UNAIDS in their call for a combined approaches to HIV prevention. It's essential that HIV testing is increased in all healthcare settings to reduce the proportion of people with undiagnosed HIV infection. HIV testing is part of a combination prevention, which UNAIDS define as: 'rights-based, evidence-informed, and community-owned programmes that use a mix of biomedical, behavioural, and structural interventions, prioritised to meet the current HIV prevention needs of particular individuals and communities, so as to have the greatest sustained impact on reducing new infections.'</p> <p>HIV testing should be considered as part of a wider approach to reducing the incidence of HIV, including the promotion of condom use</p> | | |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|---|--|--|---|
| | | | | <p>and provision of free or low cost condoms. There should be a strong link between this quality standard and the NICE Sexual Transmitted Infections: condom distribution schemes guidelines. In this way, it is important that as well as testing opportunities, bodies should promote and facilitate quick and effective treatment, condoms, need exchanges, and information & education.</p> | | |
| 64 | 4.5 | RCGP | <p>Primary care: Implementation of improved quality in sexual health care in general practice Nationally, one or two models should be developed and implemented. These 'complex intervention' models should aim to improve quality in sexual health in primary care</p> | <p>Achieving change in complex clinical behaviours in sexual health in primary care is complex, but possible. Models could be adaptable to HIV prevalence level (probably 2 or 3 models therefore) to keep relevance and 'tailoring'. Eg with or without implementation of screening of new registrants (as above). Otherwise should include:</p> <ul style="list-style-type: none"> • ability to elicit and evaluate risk (communication and history-taking) | <p>Sexual Health in Practice (SHIP) is a multifaceted educational intervention to improve sexual health care in general practice</p> | <p>See MRC Guidelines for development and implementation of complex interventions (NB both implementation and primary care leadership needed)</p> <p>SHIP published data: PILLAY, T, MULLINEUX, J. 2012 et al Unlocking the potential: longitudinal audit finds multifaceted education for general practice increases HIV testing and diagnosis. STI 10.1136/sextrans-2012-050655</p> |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|---|--|---|--|
| | | | <p>These would aim to increase HIV testing and diagnosis as well as other aspects of sexual health.</p> <p>Two models could compete (but in different areas, or inefficient); using strong, independent and properly academic/robust approaches to evaluation</p> | <ul style="list-style-type: none"> teaching of response to symptoms and signs (eg sore throat illness) by PEERS (essential) | | <p>MULLINEUX JF, V; Matthews, P; Ireson, R. Innovative Sexual health education for general practice: an evaluation of the Sexual Health in Practice (SHIP) scheme. Education for primary care. 2008;19:397–407.</p> <p>SHIP data manuscripts in development:</p> <p>i) Haringey: 8y data: A practice fixed-effects analysis quasi-experimental observation study. This shows a consistent and sustained increase in practice HIV testing rates for each individual GP trained (16%). Positivity rate 0.6 %.</p> <p>ii) Islington: 6y data set: a complex intervention with CCG and LA, shows substantial increase in HIV testing when Hepatitis testing was implemented.</p> <p>ii) From 8y Haringey lab data set evaluating SHIP impact on chlamydia tests and positives, HBV, HCV (and</p> |

| ID | Report Section | Stakeholder | Suggested key area for quality improvement | Why is this important? | Why is this a key area for quality improvement? | Supporting information |
|----|----------------|-------------|--|------------------------|---|---|
| | | | | | | looking for a fall in HVS use in response to SHIP training). Pre-results stage! |