### Expert testimony to inform NICE guideline development

#### Section A: Developer to complete

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| Role:          | Public Health Expertise |
| Institution/Organisation (where applicable): | Public Health England |

**Contact information:**

| Guideline title: | Increasing the uptake of HIV testing among people at higher risk of exposure |
| Guideline Committee: | PHAC A |

**Subject of expert testimony:** HIV testing in the UK and summary of current UK practice

**Evidence gaps or uncertainties:**
HIV new diagnoses
Latest data on the HIV epidemic was presented based on the HIV annual reports published in December 2015. Overall, the number of people living with HIV in the UK continues to increase and the number living with undiagnosed HIV remains high. In 2014, an estimated 103,700 people were living with HIV (PLWH) in the UK and 18,000 (17%) remained undiagnosed. Despite a decline in undiagnosed HIV infections among men who have sex with men there is evidence that rates of ongoing HIV transmission remain high. HIV testing in STI clinic attendees continues to increase throughout most of England with high coverage particularly among MSM. Prompt diagnosis remains a priority for heterosexuals and MSM living with HIV. The full reports are available at https://www.gov.uk/government/statistics/hiv-in-the-united-kingdom.

Current Practice in HIV Testing:
In a probability sample of the British population, 27·6% of women and 16·9% in men aged 16-44 reported having had an HIV test in the past 5 years1. In the two populations most at-risk of HIV (men who have sex with men and black Africans) the majority of respondents reported having had an HIV test (91% of MSM2 and 65% of black Africans3. Current recommendations are for individuals who think they may have been at risk should seek an HIV test. MSM should have an HIV test at least annually, and every three months if having unprotected sex with new or casual partners4.

Guidelines recommend that in all areas, regardless of background HIV prevalence, the routine offer of an HIV test to all individuals who attend a service with high background HIV prevalence (e.g. sexual health clinics, Antenatal, Termination of Pregnancy etc), who report higher risk behaviour (e.g. MSM, injecting drug use) or are diagnosed with a clinical indicator disease5. A recent audit of European centres reported HIV positivity in excess of 0.1% for many indicator conditions6, a threshold deemed cost-effective7. In areas with a high diagnosed HIV prevalence (>2/1,000 residents aged 16-65 years old), current guidelines also recommend the introduction of routine HIV testing in general medical services, such as general practice and hospital general medical admissions5. Despite evidence form a number of reviews that routine testing in UK clinical settings resulted in high positivity rates8,9, only a minority of high prevalence areas in England had implemented these recommendations10. In contrast, most high prevalence of HIV had commissioned community HIV testing services.

Recent innovations in HIV testing have been to increase access to an HIV test, either through self-testing or self-sampling. Regulations to prohibit the sale of HIV self-tests in the UK were repealed in April 2015 and so allows individuals to purchase HIV test which they can perform on themselves, in a non-medical setting (e.g. home), and see a result immediately without the mediation of a healthcare professional11. Self-sampling is when person takes a sample (saliva or blood from a finger prick), and sends it to a laboratory
for testing but the results are then given by the service. Pilot studies of HIV self-sampling proved extremely successful, able to deliver high volumes managed through the internet to populations that were different to clinic populations but were at high risk through high risk sexual behaviour and/or low HIV testing rates. Recent data from the national HIV self-sampling service reported that in the first 5 months of operation over 24,000 kits were distributed; nearly 11,000 kits were returned and tested with a reactivity rate of 1.14%. An estimated cost per reactive results is approximately £900 [personal communication Luis Guerra], which compares favourably with costs per diagnosis reported in pilots of routine HIV testing in general medical services.

References to other work or publications to support your testimony† (if applicable):