Supplementary File 1: Table of Vignettes used in the online survey.

Stigma and sensitivity

1) A young man named John is suffering from repeated infections of oral thrush (candida in the mouth), and goes to see his GP for help. This health problem suggests to the GP that John may have an HIV infection. The GP knows if she wants to test her patient for an HIV infection she will need to explain to John why she wants to run the test and get John to consent (agree) to have the tests. This process is called 'fully-informed consent'.

HIV has a special status compared to routine blood tests, for example tests for anaemia (low iron in the blood) or diabetes (blood sugar levels). This is because a few decades ago HIV was not curable, and was associated with men who have sex with men and with injection drug users. Today we know anyone can get infected with HIV, and there are better medicines to help people with HIV still live long healthy lives. However, some people still believe there is a social stigma attached to HIV which means they think having HIV says something negative about the person who has it.

The GP feels too busy and embarrassed to explain all this to John. She is not terribly familiar with HIV and does not want to offend the patient by suggesting he might have HIV. She decides not to offer John an HIV test.

The use of computer selection programmes for screening

2) A hospital tends to detect blood-borne virus (BBV) infections like HIV later compared to the rest of the country. This hospital is considering a BBV screening programme to help increase detection of infection. As with all hospitals, at this hospital there are patients who get routine blood tests, for example tests for anaemia if the patient is feeling tired or blood sugar levels to check for diabetes. The hospital wants to test all these routine blood samples for BBV infections.

A computer programme would first select blood samples that have a high chance of being infected with a BBV. It would do this by using information such as a patient's age or post code of where they live, or results of previous tests that suggest someone may also have a BBV infection, such as abnormal liver tests. Then a laboratory worker would carry out the tests for BBV infections. If the test results are positive, then a health practitioner would tell the patient. Otherwise, patients would never know their blood had been tested unless their result was positive.

3) Computer systems in GP surgeries and hospitals currently use information on patients to select certain patients for tests or screening, based on their age and diseases they suffer from (this process of screening is in line with guidance from the National Institute of Health and Care Excellence. For example a GP surgery might select men and women over 45 years to check their cholesterol or blood pressure, and patients taking certain medications that require regular blood tests. In each of these situations the computer systems are selecting patients based on certain risk factors (e.g. age) to target those at higher risk of disease and improve the cost-effectiveness of the screening system. Current national guidelines for doctors also recommend universal testing for HIV in certain areas of the country where HIV is common. Hence the area where a patient lives is already currently being used as a criterion for whether they are screened for infection.

Patient consent

4) Some health practitioners feel too uncomfortable or busy to inform patients that their blood sample may be tested for BBV infections and get the patient's **fully-informed consent**. This belief may cause practitioners to decide not to test for BBV infections, which means some patients may not ever learn they are infected.

Other ways of dealing with this issue have been suggested. For example, posters could be hung in the surgery or waiting room informing patients that their blood may be tested for BBV infections. Health practitioners could also hand out information leaflets to patients when their blood sample is being taken. It is then up to the patient to say they **do not** want to take part in the screening, or **'opt out'**, by telling the receptionist or phoning a telephone number. This type of consent, since not **fully-informed**, is described as **limited consent**. With limited consent, the patient's right to decide what happens in their health care is reduced, compared to fully-informed consent.

- **5)** Here we present a different approach to BBV screening and consent, described in the following story. A hospital in London has high levels of BBV infections in the local population and decides to run a new programme to help lower the levels of BBVs. Everyone aged 18-70 years old attending the A&E department who needs a routine blood test is also offered tests for the three BBVs (HIV, Hepatitis B and Hepatitis C) by the doctor or nurse treating them. Most patients agree to the tests with little discussion, and some choose to refuse the offer. However, there are still a few patients who ask further questions which means health practitioners need to provide counselling about the tests and what will happen if any tests are positive. The counselling takes additional staff time, this costs the hospital a lot more money. This form of consent is a **mix of fully-informed consent and limited (opt-out) consent**, depending on what the patients wants.
- **6)** A Clinical Commissioning Group (CCG) covering general practices in a rural and semi-urban area decides to pilot a BBV screening programme similar to that proposed in the video you watched. In this area a lot of patients come to see their GP with symptoms too late, and already suffer with complications of BBV infections. They choose to inform all adults in the area about the screening programme by letter, including details of how to opt out of the programme if they prefer not to be screened. They also ensure that all surgeries have posters reminding patients about the programme and that health professionals taking blood samples remind patients about it and give them a leaflet detailing how they can opt out. As well as a telephone number they can call to opt out, patients can also inform the surgery receptionists who will arrange for them to opt out.