## Multi-cancer detection testing in primary care.

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A core strategy within the NHS Long Term Plan is to diagnose 75% of cancers at an early stage by 2028. Cancer screening is only routinely available for three cancers in England and Wales, identifying 10% of adult cancers, but nine out of ten people diagnosed with cancer visit their GP with symptoms in the year prior to being diagnosed. GPs urgently refer patients with cancer symptoms according (in England) to a set of nationally agreed NICE guideline criteria via urgent two-week-wait (2WW) pathways, and 53% of cancers are diagnosed this way.

Due to the limited predictive value of symptoms, patients can require a number of 2WW referrals to different specialties before a cancer diagnosis is reached. To remedy this Rapid Diagnostic Centres are being set-up at pace across the NHS to investigate cancer across multiple difference cancer sites in patients with non-specific cancer symptoms. However, as the predictive value of symptoms is limited, attention is turning to non-invasive multi-cancer early detection (MCED) testing in primary care to inform the selection of the most appropriate definitive cancer investigation.

A number of companies are developing MCED blood tests. These tests provide a result that indicates whether a cancer has been detected, and if so predicts what sort of cancer. Whilst these are exciting and novel technologies that offer great promise in primary care there is limited research to support their adoption. The successful candidate would join a programme of work investigating the use of MCED testing in primary care.

## Other University of Oxford Wellcome DRF studies

The department of primary care at Oxford has an unrivalled investment and range of research infrastructure to support EMC researchers from an accredited CTU, to hosting 3 of the 4 major UK PC databases (each having particular benefits), to a strong multi-disciplinary environment of world class academics from clinical primary care, public health, epidemiology, statistics, health economics, social sciences, all available in-house. We also have excellent support teams for students, access to renowned masters-level modular training programmes, and superb physical space and access to the greatest provision of library and museum resources in Europe in the world's top university and historic city. Other projects are possible in CVD, diabetes, cancer, infection, behaviour change, disease diagnosis, risk prediction, digital health, and social sciences.