NHS Innovation Accelerator 2022 Intake Call

Theme 2: Early detection or diagnosis

Early detection or diagnosis of a disease plays an important role in the quality of life of each patient. If diagnosed at an early stage some diseases can be cured fully or certain disease states can be reversed. For others, it may mean longer survival rates. Diagnosing a disease while it is asymptomatic is the aim of many public health screening programmes in the UK. This is behind the establishment of many public health programmes for chronic diseases like cancer, respiratory disease, diabetes, and cardiovascular disease.[1]

The LTP sets out an ambition to transform cancer care so that from 2028, an extra 55,000 people each year will survive for five years or more following their cancer diagnosis and three in four cancers (75%) will be diagnosed at an early stage. Earlier diagnosis is critical to meeting this survival ambition, as it means patients can receive treatment when there is a better chance of achieving a complete cure.[2] However, the effects of COVID-19 on the capacity of the health system have slowed down the diagnosis colorectal cancers. There was a 63% reduction of suspected colorectal cancer referrals and 92% reduction in number of colonoscopies compared to April 2019. Although these numbers returned to 2019 levels in October 2020, there is an increasing backlog that will inevitably present, possibly with later stage cancer.[3]

In other areas, cardiovascular disease (CVD), causes a quarter of all deaths in the UK and is the largest cause of premature mortality in deprived areas. The LTP has identified this as the single biggest area where the NHS can save lives over the next 10 years. CVD is largely preventable, through lifestyle changes and a combination of public health and NHS action on smoking and tobacco addiction, obesity, tackling alcohol misuse and food reformulation. Early detection and treatment of CVD can help patients live longer, healthier lives. Other countries have made progress on identification and diagnosis working towards people routinely knowing their 'ABC' (AF, Blood pressure and Cholesterol).[4]

Respiratory disease is the third biggest cause of death in the UK. Hospital admissions for lung disease have risen over the past seven years at three times the rate of all admission. The LTP sets out a commitment to targeting investment in improved treatment and support for those with respiratory disease, with an ambition to transform outcomes to equal, or better, our international counterparts. Incidence and mortality rates for those with respiratory disease are higher in disadvantaged groups and areas of social deprivation. The LTP sets a commitment to reduce variation in the quality of spirometry testing across the country, improving the diagnosis of respiratory conditions.

We want to see innovations focused on early diagnosis of all diseases.

We are interested to hear about all types of innovations (e.g., service, pathway, process, workforce, device, IT platform or app) that offer a way to diagnose disease early. This applies to all disease areas where an early diagnosis can support:

- patients to live a better quality of life/ better health care experiences and outcomes.
- health care to deliver or organise care differently – to improve patient outcomes and/ or to create internal efficiencies in processes and/ or freeing up workforce time.

If your innovation has a digital component, we would welcome a discussion about how you are / can think about and begin to address possible digital exclusion.

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[1] Early detection of disease and scheduling of screening examinations - PubMed (nih.gov)
[2] NHS Long Term Plan and NHS England » 2021/22 priorities and operational planning guidance
[3] Impact of the COVID-19 Pandemic on Colorectal Cancer Screening: a Systematic Review (nih.gov)
[4] NHS Long Term Plan