The CanTest Collaborative – a catalyst to help GPs diagnose cancer

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www.cantest.org
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Overview

1. Cancer diagnostics in primary care

2. Introduce the CanTest Collaborative

3. Seek your input and feedback
The expanding role of primary care in cancer control

‘For a long time, the role of primary care in cancer was largely seen as peripheral, but as prevention, diagnosis, survivorship and end-of-life care assume greater importance in cancer policy, the defining characteristics of primary care can become more important’

Rubin et al. Lancet Oncology 2015;16; 1231-72
How do people get to a diagnosis?

- Screening
- GP referral
  - 2ww
  - Non-2ww
- Emergency
- Hospital (in/outpatient)

And impact on stage?
National ambition to achieve earlier diagnosis

- ‘This will require a shift towards faster and less restrictive investigative testing, quickly responding to patients who present with symptoms, by ruling out cancer or other serious disease.

- We recommend setting an ambition that by 2020, 95% of patients referred for testing by a GP are definitively diagnosed with cancer, or cancer is excluded, and the result communicated with the patient, within four weeks.’

- Delivering this will require a significant increase in diagnostic capacity, giving GPs direct access to key investigations’
Little evidence for cancer tests in primary care

- NICE guidance (2015) - about 30 systematic reviews, little evidence

- Using secondary care data risks spectrum bias, with different populations and the disease earlier in its evolution

- In primary care we don’t know
  - false-positive/negative rates
  - psychological sequelae
  - health-economics
  - potential over-diagnosis
The ‘CanTest’ Collaborative

‘Detecting cancer in primary care: a paradigm shift in cancer diagnosis’

Cancer Research UK Catalyst Award 2017-22
CanTest - Aims

- Increase capacity and sustainability of cancer detection research
- International School for Cancer Detection Research in Primary Care
- Identify existing and emerging tests, and alternative international models of care delivery related to cancer diagnosis, and assess potential for UK
- Evaluate the availability, acceptability (to patients and PCPs), accuracy, and cost-effectiveness of cancer tests, including optimising the use of new tests, existing tests, tests used in specialty care
- Quantify any possible harms arising from increased testing for cancer in primary care, & create strategies to balance harms & benefits
<table>
<thead>
<tr>
<th>Possible benefits</th>
<th>Possible harms</th>
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<tbody>
<tr>
<td>Expedites the diagnosis and may improve survival</td>
<td>Over-diagnosis</td>
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<td>Improved patient experience (less travel, inconvenience)</td>
<td>Will the patient have less confidence in the result?</td>
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<td>Reduced time to test, with less anxiety</td>
<td>More patients being tested may increase anxiety</td>
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<td>Less opportunity for system harm, like lost results</td>
<td>Potential difficulty in result interpretation</td>
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<td>Probable reduced costs per test</td>
<td>What will GPs do less of instead?</td>
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<td>Saves specialist time</td>
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So, what tests – and when?

- **Spectrum of tests**
  - Blood (platelets, FBC, Ca125, Ca19.9, novel biomarkers, SNP panels)
  - Imaging (CT, MRI, ultrasound, robotic ‘oscopies, teledermoscopy),
  - Volatile organic compounds
  - Other bodily fluids (saliva, urine, semen)
  - Other technologies (e-decision support, machine learning, AI)
  - Point of care tests

- **Spectrum of cancers**
  - ‘Harder to diagnose’ (lung, pancreas, renal, myeloma)
  - Poor prognosis
  - Commoner and rarer cancer

- **Spectrum of place in the diagnostic pathway**
  - ‘At-risk’ patients
  - ‘Rule-out’ tests
  - Specific symptoms and symptoms complexes, as a gateway to further investigation – or preventing further investigation / referral)
So, what tests – and when?

- Would you want?
- Where in the pathway?
- Where are the difficulties in current primary care diagnostics?
Institutions and capacity

Leeds, UK
Neal

Cambridge
UK
Walter
Sutton

Exeter
UK
Hamilton
Abel, Spencer

UCL, UK
Lyratzopoulos
Institutions and capacity

Aarhus, DK
Vedsted

Leeds, UK
Neal

Cambridge, UK
Walter Sutton

Exeter, UK
Hamilton Abel, Spencer

Washington, Seattle, US
Thompson

UCL, UK
Lyratzopoulos

Melbourne, Au
Emery

Houston, Texas, US
Singh
The ‘CanTest’ Collaborative
‘Laboratories’ for primary care studies

NIHR
- Clinical Practice Research Datalink (CPRD)
- Clinical Research Network (CRN) facilitating practice-based cohort/s
- BioResource

International
- UW Primary Care Innovations Lab
- Houston VA Quality Informatics Program
- Australia- VicRen network
- Denmark- CaP network

Local
- Leeds Care Record
- PPM SystmOne
- Labs
Training and development

- INTERNATIONAL SCHOOL FOR CANCER DETECTION RESEARCH IN PRIMARY CARE
  - Use the senior faculty to teach at annual residential meetings
  - Develop & mentor future cancer research leaders to establish personal research programmes

- The CANTEST BURSARY will annually award competitive KNOWLEDGE TRANSFER FELLOWSHIPS to:
  - Support CanTest researchers to visit other institutions
  - Support researchers from other institutions & countries to attend the International School
The crack team who want to catch cancer early

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If GPs could diagnose more quickly, more lives could be saved. By Sarah Freeman

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