Early Diagnosis: 10 years on

Sara Hiom
Director of Early Diagnosis and Health Professional Engagement

Cancer Research UK 5th Biennial Early Diagnosis Research Conference
11th – 13th February 2019
Birmingham, UK
Recap from yesterday

Monday 11th February

**Early Career Researchers: Showcase of research into early diagnosis**

- Dr Katriina Whitaker and Dr Fiona Reddington (chairs)
- Dr Paula Bradley
- Dr Robert Kerrison
- Dr Cathrine Wildenschild Nielsen
- Dr Marije van Melle
- Bethany Wickramasinghe
- Hanna Skrobanski

**Sharing insights: research and initiatives to improve public awareness and drive behaviour change**

- Professor Yoryos Lyratzopoulos (chair)
- Carolynn Gildea
- Katie Connor
- Dr Monica Koo
- Natalia Calanzani

**Poster viewing and welcome reception**
## Tuesday 12th February

- **Welcome:** Sara Hiom
- **Keynote:** Professor Harry De Koning
  - **Emerging evidence:** a spotlight on lung cancer
  - **Keynote:** Dr Jem Rashbass
- **Exploring and using national cancer data for patient gain**
  - ‘Zombie Apocalypse’
  - **Keynote:** Sara Hiom, Cancer Research UK
  - **Keynote:** Professor Robert Steele CBE
- **Late breaking showcase**
  - **Keynote:** Professor Sir Mike Richards CBE
- **Targeted breast screening and care: developments and insights to shape the future for patients with breast cancer**
- **Panel debate:** accelerating innovation and advancements in research
  - Panellists including: Professor Gareth Evans, Fiona Walter, Geoffrey Hamilton-Fairley, Professor Stan Kaye, Fiona Reddington
- **Reflections from day one:** Mike Richards and Sara Hiom
- **Accelerating the pace of scientific progress through access to data**
- **CRUK funding opportunities and advice:** Population research and research careers team
- **10 Years On: Anniversary Dinner and Awards**
Wednesday 13th February

Keynote: Professor Willie Hamilton CBE

Optimising recognition and referral across the patient pathway

Keynote: Cally Palmer CBE

Panel debate: Accelerating shifts in stage
Panellists including Professor Tom Crosby OBE, Jane Lyons, Professor Willie Hamilton CBE, Dr Jodie Moffat, Tom Haswell

Working lunch: Spotlight on cancer pathways
Speakers include: Professor Tom Crosby OBE, David Fitzgerald, Margaret Kelly

Spotlight: cervical screening

<table>
<thead>
<tr>
<th>Emerging evidence from MDCs in the UK</th>
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<tbody>
<tr>
<td>Using local data to drive progress</td>
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</table>

Keynote: Mr John Butler

Evidence to make a difference in rare and less common cancers
Housekeeping

- Fire drills
- Mobile phones
- Eventpro UK

- Evaluation forms
- Presentations
- Filming

Wifi: BTOpenZone
Password: cruk19

Slido: Download app or sign up at www.sli.do
Early diagnosis: 10 years on

- Late stage diagnosis is still a problem
- Progress over the last 10 years:
  - Screening
  - Awareness & Beliefs
  - Primary Care
  - Diagnostic Pathways
Late stage diagnosis is still a problem

Three quarters of patients with cancer are diagnosed by GP after one or two visits.

Helping GPs make an early diagnosis of cancer

'High' survival for many cancers diagnosed at stages 1-3

Cancer survival rates joy...if it's caught early

PEOPLE diagnosed with skin, prostate or breast cancer have the same chance of being alive after a year as the general population.
How can we **reduce late stage diagnosis**?

Act across the pathway

<table>
<thead>
<tr>
<th>Age</th>
<th>Sex</th>
<th>Ethnicity</th>
<th>Socio-economic status</th>
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<tbody>
<tr>
<td>Difficulty accessing primary care</td>
<td>Low public awareness</td>
<td>Barriers to help-seeking</td>
<td>Negative beliefs about cancer</td>
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<tr>
<td>Delays in primary care interval</td>
<td>Late presentation to a GP</td>
<td>Low uptake of screening</td>
<td></td>
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<tr>
<td>Access to diagnostics and 1st/2nd care interface factors</td>
<td>Late presentation to hospital services</td>
<td>Emergency presentations</td>
<td></td>
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<tr>
<td>Delays in secondary care interval</td>
<td>More advanced disease at diagnosis</td>
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<td></td>
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<tr>
<td>Treatment</td>
<td>Access to treatment</td>
<td>Other factors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor survival</td>
<td>Premature mortality</td>
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</tbody>
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Avoidable deaths

Hiom et al. (2015) Diagnosing cancer earlier: reviewing the evidence for improving cancer survival. BJC
The changing focus on early diagnosis in cancer strategies

- 2007: Cancer Reform Strategy¹ for England published. The first to include early diagnosis as a priority
- 2008: Scotland’s Better Cancer Care Action Plan² launched
- 2011: Improving Outcomes for Cancer Strategy published in England
- 2015: Achieving World Class Cancer Outcomes strategy for England³ published
- 2016: Beating Cancer: Ambition and Action published in Scotland
- 2017: Cancer Delivery Plan for the NHS to 2020⁴ published in Wales

“Early diagnosis is vital if we are to achieve a genuinely world-class cancer service”¹

“The Scottish Government is committed to an evidence-based approach to screening”²

“NHS England should mandate that GPs have direct access to key investigative tests for suspected cancer...by the end of 2015.”³

“awareness and behaviours of people who might be affected by cancer and among primary care teams; improved screening uptake and the interface between primary and secondary care; improved access and efficiency of diagnostic and treatment services”⁴

¹Cancer Reform Strategy, Foreword, Gordon Brown,²Scotland’s Better Cancer Care Action Plan,³Achieving World Class Cancer Outcomes,⁴Cancer Delivery Plan
Late stage diagnosis is still a problem

Progress over the last 10 years:
- Screening
- Awareness & Beliefs
- Primary Care
- Diagnostic Pathways
What progress have we made in screening over the last decade?

2008
- Bowel screening established in Northern Ireland
- Bowel scope paper shows reduction in bowel cancer incidence and mortality

2010
- National Lung Screening Trial results published

2011
- Independent Breast Screening Review published

2012
- Bowel scope screening initiated in England

2013
- Faecal immunochemical test (FIT) rolled out in Scotland
- Screening and inequalities network established in Scotland
- Wales launch HPV as primary cervical screening test

2017
- Review of Screening Programmes in Scotland

2018
- England - Commitment to reduce bowel cancer screening age to 50
**Spotlight: Faecal Immunochemical Test**

Replacement of the gFOBt test with the more sensitive and easier-to-use faecal immunochemical test (FIT)¹

Plans for ‘FIT’, a more sensitive bowel cancer test... will be confirmed²

The introduction of FIT within the bowel screening programme is expected to start during 2018/19³

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¹ Achieving World Class Cancer Outcomes ² NHSE announcement ³ GOV Wales newsroom ³ sTV News

Kathryn Whitmore, 11/02/2019
What progress have we made in awareness & beliefs over the last decade?

- **2008**: National Awareness and Early Diagnosis Initiative (NAEDI) launched
- **2009**: Detect Cancer Early (DCE) programme launched in Scotland
- **2010**: First all-England Be Clear On Cancer campaign
- **2011**: ICBP awareness and beliefs about cancer paper published
- **2012**: First Be Cancer Aware campaign in Northern Ireland
- **2013**: Scottish Government/CRUK “wee c” campaign
- **2014**: Lung cancer awareness BCOC campaign in Wales

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**Differences in cancer awareness and beliefs between Australia, Canada, Denmark, Norway, Sweden and the UK (the International Cancer Benchmarking Partnership): do they contribute to differences in cancer survival?**


British Journal of Cancer 106, 283–308 (2012) | Download Citation

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**Full Paper**

Public awareness of cancer in Britain: a population-based survey of adults

K. Robb¹, S. Stubbings¹, A. Ramirez³, U. Macleod¹, J. Austoker¹, J. Waller¹, S. Hiom³ and J. Wardle⁴,⁵

¹Cancer Research UK Health Behaviour Research Centre, Department of Epidemiology and Public Health, UCL, Gower Street, London WC1E 6BT, UK; ²Cancer Research UK Preventing Early Presentation Group, Institute of Psychiatry, Kings College London, St Thomas Hospital, London, UK; ³General Practice and Primary Care, Division of Community Based Sciences, Faculty of Medicine, 1 Hermitage Road, Glasgow, UK; ⁴Cancer Research UK Primary Care Education Research Group, Cancer Epidemiology Unit, University of Oxford; Richard Doll Building, Radcliffe Quad, Oxford, UK; ⁵Health Information Department, Cancer Research UK, 11 Lincoln’s Inn Fields, London, UK

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**Lung cancer awareness campaign**

11 July – 11 August 2016
Awareness and stage shift

An evaluation of the impact of large-scale interventions to raise public awareness of a lung cancer symptom

L Ironmonger, E Ohuma, N Ormiston-Smith, C Gildea, C S Thomson and M D Peake

1Statistical Information Team, Cancer Research UK, Angel Building, 407 St John Street, London EC1V 4AD, UK; 2Knowledge and Intelligence Team (East Midlands), Public Health England, Sheffield S10 3FQ, UK; 3Information Services Division, NHS National Services Scotland, Edinburgh EH12 9EB, UK; 4Department of Respiratory Medicine, Glenfield Hospital, Leicester LE3 9QP, UK; 5National Cancer Intelligence Network, Public Health England, Wellington House, London SE1 8UG, UK and 6Royal College of Physicians, London NW1 4LE, UK

Been coughing for 3 weeks? Tell your doctor.

BE CLEAR ON CANCER
What progress have we made in primary care over the last decade?

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2008</td>
<td>The CAPER studies published</td>
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<tr>
<td>2009</td>
<td>Improving Cancer Outcomes recommends GP direct access for key test</td>
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<tr>
<td>2011</td>
<td>CRUK Facilitator programme pilot</td>
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<tr>
<td>2012</td>
<td>RCGP – CRUK Partnership established</td>
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<td>2013</td>
<td>PCTs replaced by CCGs. SCNs established.</td>
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<tr>
<td>2015</td>
<td>Cancer Decision Support (CDS) tool pilot</td>
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<tr>
<td>2016</td>
<td>NG12 update – lower threshold for referral</td>
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<tr>
<td>2018</td>
<td>ICBP Module 3 – publication linking readiness to refer with survival</td>
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<tr>
<td>2019</td>
<td>National Cancer Diagnosis Audit</td>
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<td>Scottish cancer referral guidelines review</td>
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Spotlight: National Cancer Diagnosis Audit

WHEN MIGHT AVOIDABLE DELAYS HAPPEN IN CANCER DIAGNOSIS?

GPs considered delays to happen to patients when...

Waiting for tests & results 33.7%
- Waiting for a referral (a specialist appointment) 19.7%
- Being assessed (by GP or specialist doctor) 16.7%
- Patient doesn’t seek help (eg. missing appointments) 15.5%
- Waiting for an appointment 7.3%
- Waiting for follow-up (eg. after test results) 7.1%
- Unknown 3.6%

Source: National Cancer Diagnosis Audit, 2017
LET’S BEAT CANCER SOONER
cruk.org
What progress have we made in **diagnostic pathways** over the last decade?

- **2008**
  - First cytosponge trial published

- **2010**
  - Accelerate, Coordinate, Evaluate (ACE) launched
  - British Thoracic Society Guidelines for the Investigation and Management of Pulmonary Nodules
  - CRUK Horizon scanning and Scoping the future reports published
  - CRUK testing times to come reports published

- **2014**
  - NICE DG30 guidance for the use of FIT in symptomatic patients published

- **2015**
  - Completion of ACE Wave 1

- **2016**
  - National Optimal Lung Cancer Pathway (NOLCP) published

- **2017**
  - Preliminary ACE MDC results published

- **2018**
  - Rapid cancer diagnostic and assessment pathways published (monitored from 2020)

- **2019**
  - ‘Capacity to diagnose?’ CRUK report

- **2020**
  - ‘Capacity to diagnose?’ CRUK report published (monitored from 2020)
Spotlight on multidisciplinary diagnostic centres (MDCs)

How MDCs Could Improve Early Cancer Diagnosis

How Delays Can Occur in the Current System:

1st GP Visit
- GP Referral
- Time Waiting

2nd GP Visit
- GP Referral
- Time Waiting

3rd GP Visit
- GP Referral
- Time Waiting

Returning to the GP after visiting each specialist slows down the diagnosis and increases the likelihood of patient disengagement.

1st Specialist
- Patient with non-specific but concerning symptoms

2nd Specialist
- If more medical specialists seen, pattern continues until a result is declared

3rd Specialist*
- Nothing found, watchful wait
- Late Cancer diagnosis
- Other diagnosis

Proposed MDC System

Access Point
- Could be GP or other professional referral as well as self-referral e.g. internet, telephone

Specialists Working Together
- Pilot will determine the best configuration for specialists

Triage Tests
- Rapid turnaround of triage tests and investigative diagnostic tests leads to earlier diagnosis

Let's Beat Cancer Sooner

cruk.org

Cancer Research UK
Diagnosing cancer: a needle in a haystack

66,850,000 UK population
494,100,000 health service interactions

303,120 cancer cases

Routes to diagnosis, England, 2016
Late stage diagnosis is still a problem

Incidence by stage (2016) overlaid with 1-year survival by stage (2015, followed up to 2016)

![Chart showing incidence by stage and 1-year survival overlaid for various cancer types.](chart.png)

Stage:
- I
- II
- III
- IV

Cancer types:
- Breast
- Prostate
- Lung
- Bowel
- Melanoma

Number of cases and 1-year survival shown for each stage and cancer type.

Late stage diagnosis is still a problem
WE NEED YOU
Thank you!

#CRUK10yearsofearlydiagnosis

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