

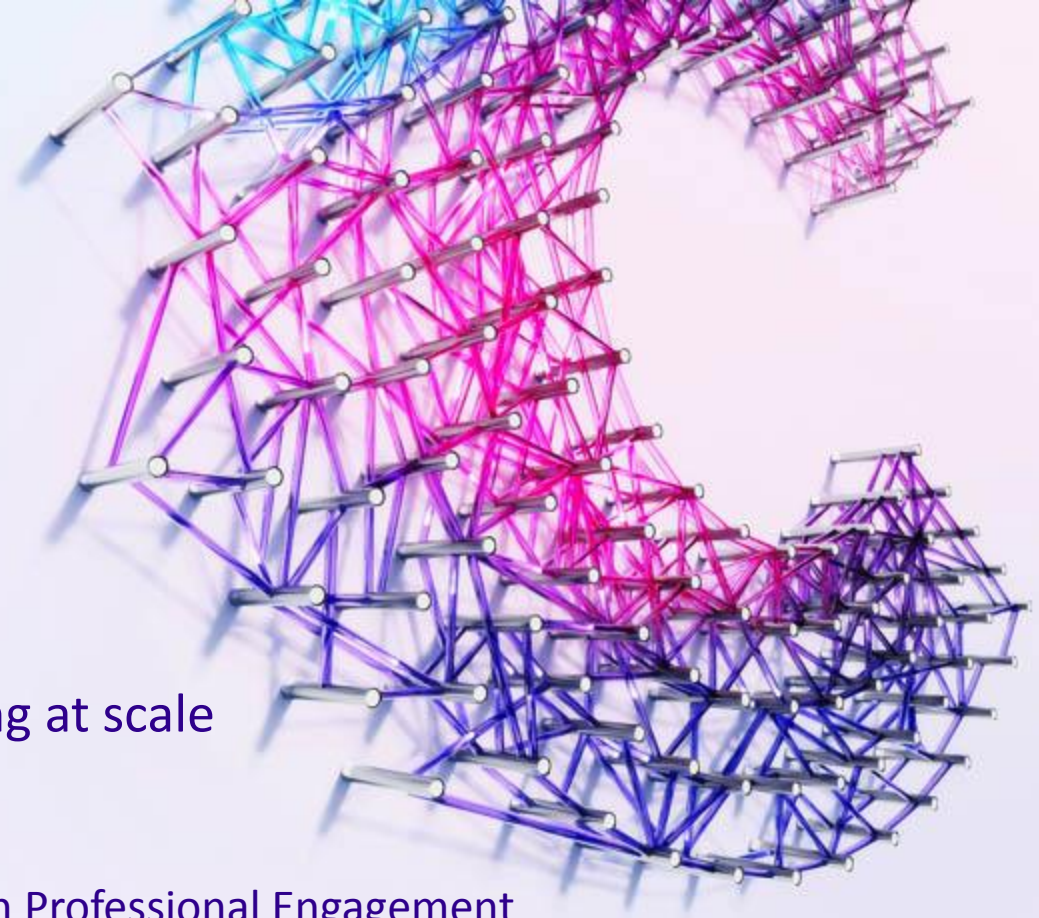
# A national perspective, on Multidisciplinary Diagnostic Centres and the ACE programme

## Session:

Benefits of partnership working at scale

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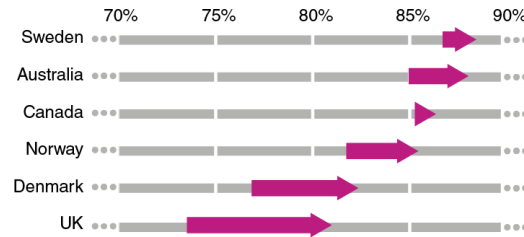
# SESSION OUTLINE

- Context – early diagnosis
- Concept – Multidisciplinary Diagnostic Centre (MDC)
- Interim results – across England
- Partnership working – the ACE Programme

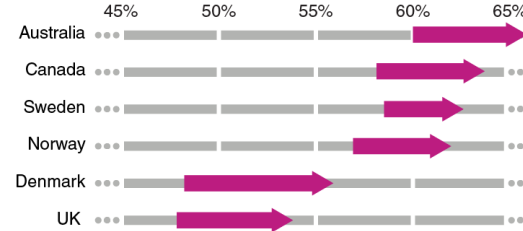
# BENCHMARKING DATA HIGHLIGHTS A SURVIVAL GAP

Although an improving picture, cancer survival in the UK trails behind comparable countries

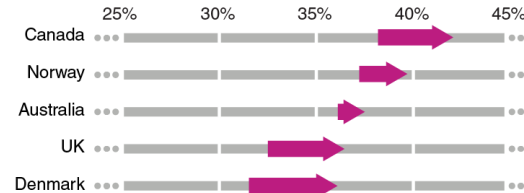
**Breast cancer** 5-year survival changes, 1995-1999 to 2005-2007



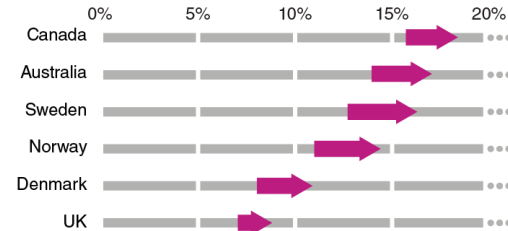
**Colorectal cancer** 5-year survival changes, 1995-1999 to 2005-2007



**Ovarian cancer** 5-year survival changes, 1995-1999 to 2005-2007



**Lung cancer** 5-year survival changes, 1995-1999 to 2005-2007



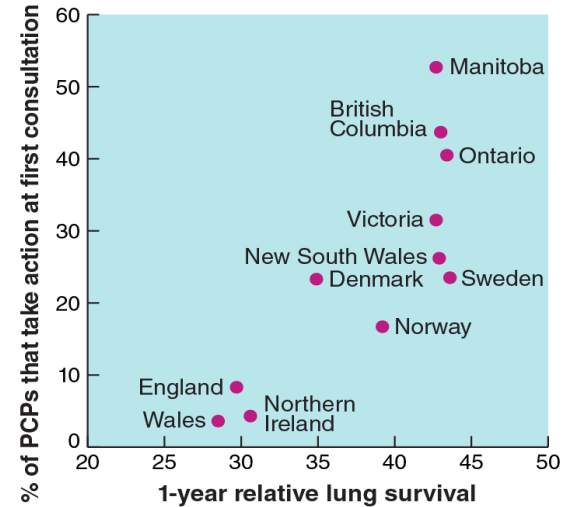
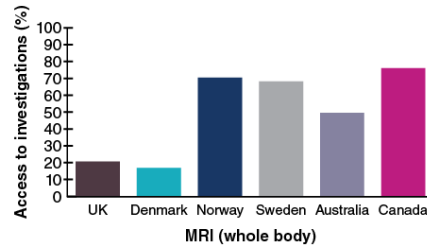
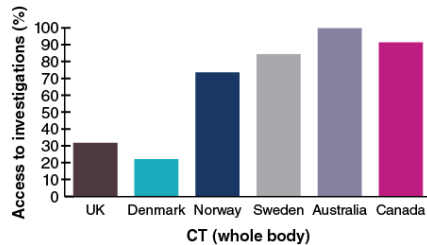
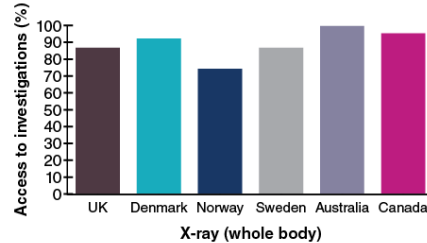
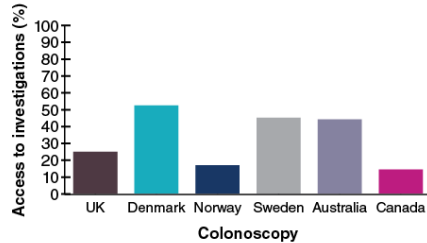
Source: International Cancer Benchmarking Partnership M1 - 5 year survival, 1995-2007. Published 2011

*Providing increased impetus amongst professionals in the UK to improve early diagnosis*

# OUR HEALTH SYSTEM IS NOT SETUP FOR EARLY DIAGNOSIS

The UK, versus other comparable countries, has:

- Less access to diagnostics
- Lower willingness to investigate low risk symptoms



Readiness of PCPs to investigate low risk symptoms that could be indicative of lung cancer and 1-year relative survival.

Source: International Cancer Benchmarking Partnership M3 - Survey 2012-2013. Published 2015

# A NEW PARTNERSHIP APPROACH TO SERVICE INNOVATION

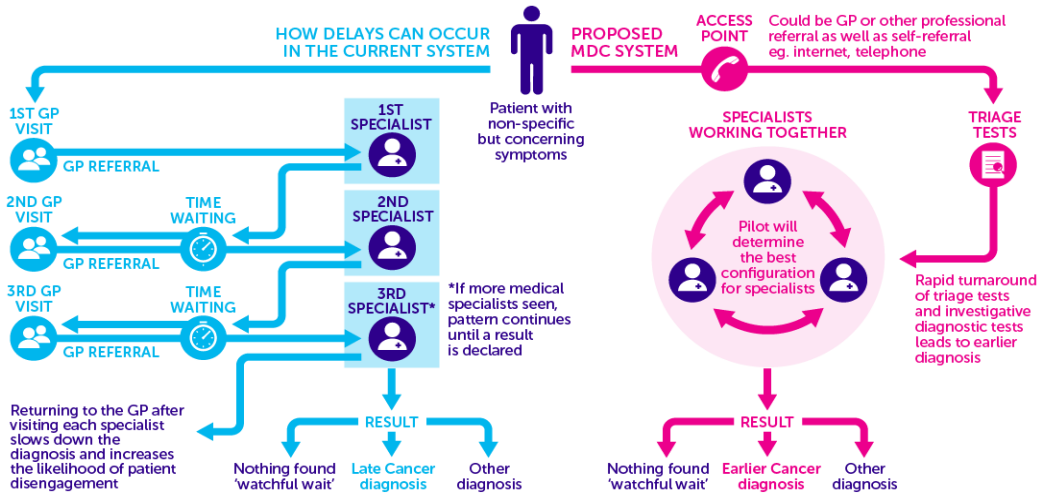
The **ACE** Programme was set up in 2014 to **Accelerate, Coordinate and Evaluate** a range of innovative approaches being taken across England to help diagnose cancer earlier



*A collaboration that combines: policy makers, clinicians, academics and charity  
'policy to practice' influencers*

# MULTIDISCIPLINARY DIAGNOSTIC CENTRE (MDC)

## HOW MDCs COULD IMPROVE EARLY CANCER DIAGNOSIS



Source: Cancer Research UK

Diagnostic tests are ideally accessed in one location and conducted on one visit when clinically possible, with a number of specialists working together to speed up diagnosis

- An MDC provides rapid access to a range of diagnostic tests for patients with **non-specific but concerning symptoms (NSCS)**
- It aims to support **earlier and faster detection** of cancers for this patient group
- As well as **improving patient and GP experience** for non-specific but concerning symptom referrals

# THERE ARE 10 MDCS ACROSS ENGLAND

## Airedale, Wharfedale & Craven

**MDC site:** Airedale General Hospital

## Greater Manchester

**MDC sites:** Manchester University NHS Foundation Trust (Wythenshawe Hospital) and The Northern Care Alliance (Royal Oldham Hospital)

## Oxford

**MDC site:** Oxford University Hospital Trust (Specialist Cancer Centre)



## Leeds

**MDC site:** St James University Hospital (Specialist Cancer Centre)

## London

**MDC sites:** North Middlesex University Hospital, University College London Hospital (Specialist Cancer Centre), Southend University Hospital, Queens (BHRUT) and the Royal Free Hospital

- A common dataset agreed across the projects
- Comparator data for each project area; only partial data and largely retrospective audits
- National Cancer Diagnosis Audit used to create a 'proxy comparator pathway' for NSCS patient cohort
- Collection of MDC data is ongoing (expect final cut-off for evaluation to be end July 2018)

*A national approach allows different NHS settings to be explored and creates a larger MDC referral data set for analysis*

# MDC PATHWAYS - OVERALL DESIGN



- Patient mainly presents to GP with non specific but concerning symptoms
- Initial filter tests (blood, urine, CXR) & Low dose CT (Oxford)



- Triage using CNS assessment
- Triage (Oxford) (led by radiographer (CT and other tests results))



- Further diagnostic tests based on patients needs, (watch and wait, MDC safety netting (Leeds))
- Diagnosis (appropriate cancer pathway, non cancer pathway, return to GP, all clear given)



## MDC COHORT DETAILS (UP TO 28<sup>TH</sup> FEB 18)

MDC		Number of cases	Median age	Patient age range	% female
	Airedale	187	72	22-93	53
Great Manchester	Royal Oldham	119	70	22-89	57
	Wythenshawe	187	70	29-94	60
	Leeds	326	69.5	18-97	50
London	Queen (BHRUT)	119	66	22-92	51
	North Middlesex	103	63	18-89	54
	Royal Free	8	64.5	48-76	63
	UCLH	281	64	17-91	59
	Oxford	293	71	44-97	60
<b>Total</b>		<b>1,623</b>	<b>67.8</b>	<b>17-97</b>	<b>56</b>

NB: Different/staggered 'go-live' dates, from Dec 16 to Jan 18

NB: Oxford minimum age criteria >40 yrs

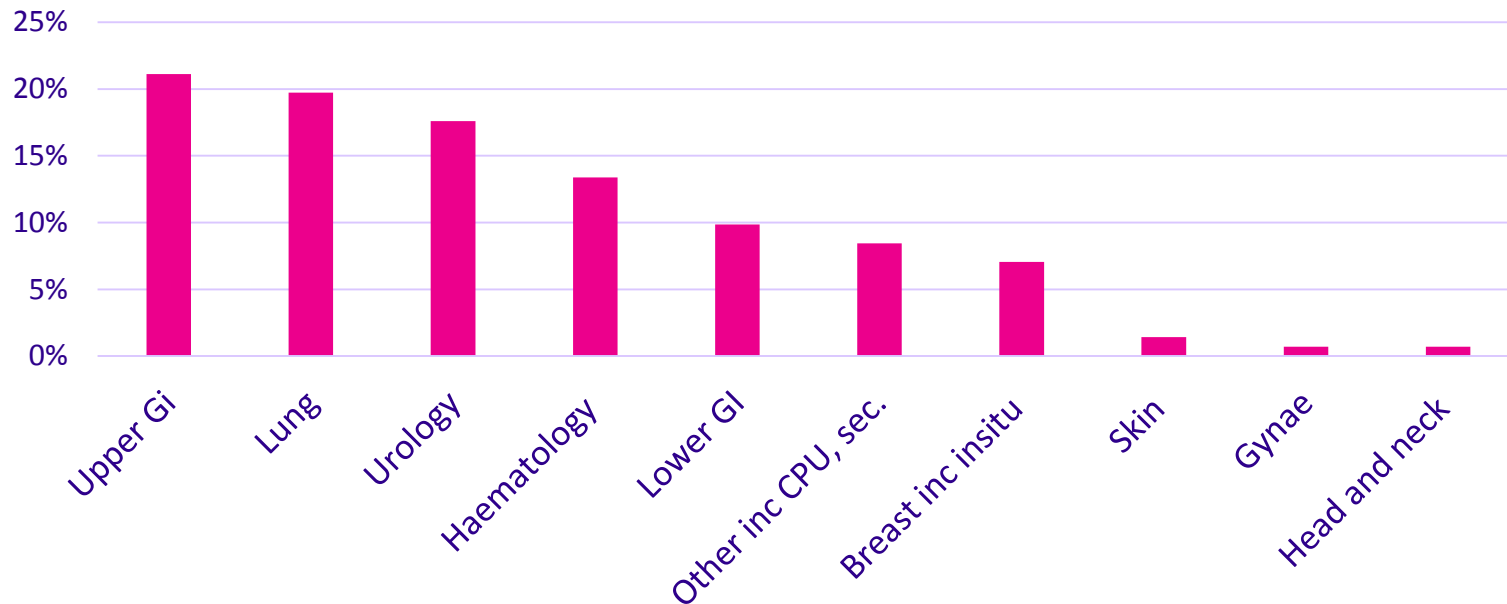
## MDC EARLY FINDINGS (UP TO 28<sup>TH</sup> FEB 18)

- Main presenting symptoms were weight loss; nausea and loss of appetite and abdominal pain
  - 53% reported symptoms had started more than 3 months prior to MDC referral (based on 2/3 records)
- 60% of cases have staging data of those 25% are early stage
  - Over 34% of patients were given at least one non-cancer diagnosis
- 85% of patients responded positively to the question 'Effectiveness of people working together to provide the best possible care for patients (61.2% CPES 2016)

## CANCER DIAGNOSES BY MDC (up to 28<sup>th</sup> Feb 18)

MDC		Number of cases	Number of cancers	Conversion rate
	Airedale	187	18	10
Great Manchester	Royal Oldham	119	17	14
	Wythenshawe	187	13	7
	Leeds	326	27	8
London	Queen (BHRUT)	119	8	7
	North Middlesex	103	6	6
	Royal Free	8	-	-
	UCLH	281	10	4
	Oxford	293	43	15
Total		<b>1,623</b>	<b>142</b>	<b>9</b>

# CANCER DIAGNOSES DISTRIBUTION (up to 28<sup>th</sup> Feb 18)



Broad cancer category	Main cancer type within top 4 categories	N
Upper GI	Malignant neoplasm of pancreas	11
Lung	Malignant neoplasm of bronchus and lung	25
Urology	Malignant neoplasm of kidney, except renal pelvis	11
Haematology	Follicular (nodular) non-Hodgkin's lymphoma	6

# IN SUMMARY

- ✓ MDC-based pathways are providing rapid diagnoses for patients within planned routes of care
- ✓ Cancer conversion rate is currently 9%
- ✓ The majority of diagnosed cancers are predominantly associated with broad symptoms with varying or low predictive values
- ✓ MDCs positively received by patients as well as primary and secondary care clinicians

≈ *MDCs are potentially effective for complex patients and diagnosing hard to detect cancers*

## FURTHER WORK ...

- The data evolves daily and data collection, as part of the overall evaluation, is still ongoing
- Improvement of data quality and comparator data
- More granular exploration of data to include:  
symptoms and disease / stage and treatment / interval time by cancer type / geographical cancer distribution / outcomes by MDC

*Final analysis will be presented in a series of papers over winter 18/19*

# BENEFITS OF PARTNERSHIP WORKING AT SCALE

- Different implementation contexts considered, providing broader assurance around usefulness of concept
- Larger cross-MDC data set improves analysis of small numbers in individual MDCs, particularly for less common cancers
- Mutual support and learning enjoyed across projects in Wave 2 cohort, creating a learning set approach to design and implementation
- Cohort pathfinder approach can be used to support wider implementation across the NHS in England and devolved nations

# ACKNOWLEDGMENTS

**MDC project leads:** Dawn Gulliford (Airedale), Karen Blackburn and Susan Sykes (Greater Manchester), Helen Ryan (Leeds), Felicity Carson (London), and Zoe Kaveney (Oxford)

**Project clinical teams from:**

- Airedale General Hospital
- Manchester University NHS Foundation Trust (Wythenshawe Hospital) & The Northern Care Alliance (Royal Oldham Hospital)
- Leeds St James University Hospital (Specialist Cancer Centre)
- London: North Middlesex University Hospital, University College London Hospital (Specialist Cancer Centre), Southend University Hospital, Queens (BHRUT) & the Royal Free Hospital
- Oxford University Hospitals Trust (Specialist Cancer Centre)

**ACE evaluation leads:** Dave Chapman, Véronique Poirier, Clare Pearson, Karen Fitzgerald

**Policy Research Unit cancer evaluation team:** Stephen W. Duffy, Daniel Vulkan



**THANK YOU**

