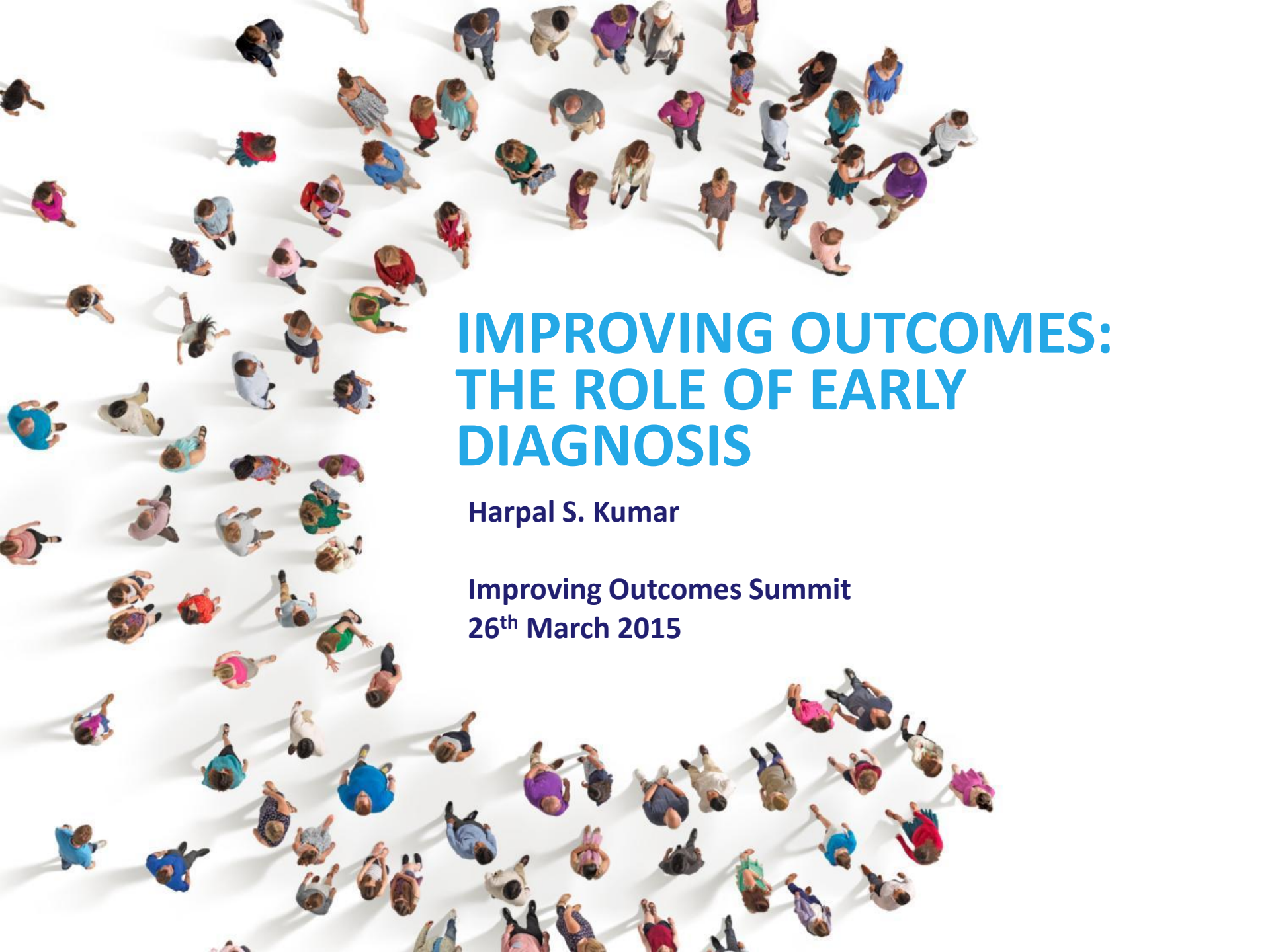




IMPROVING OUTCOMES: THE ROLE OF EARLY DIAGNOSIS

Harpal S. Kumar

Improving Outcomes Summit
26th March 2015

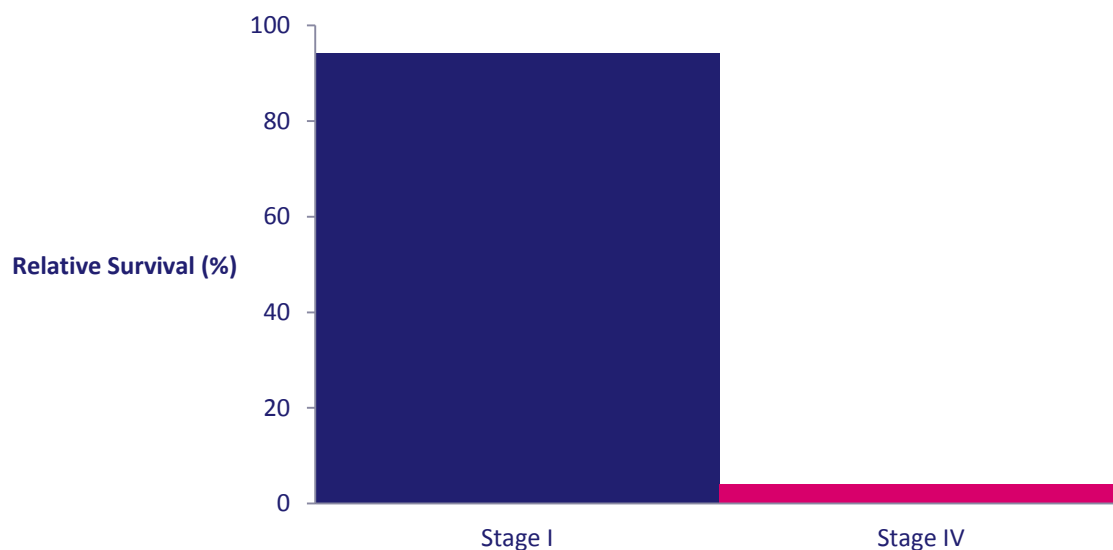
Summary

1. Early diagnosis is key in beating cancer; diagnosing more cancers earlier would be good for patients and the UK
2. The UK/England continues to lag behind the best in the world
3. There is unacceptable variation across the country
4. Awareness and public behaviour
5. Optimising clinical practice and systems

The principles underlying earlier cancer diagnosis would also benefit outcomes in other diseases

Early diagnosis is key in beating cancer

Bowel Cancer Ten-Year Relative Survival by Stage

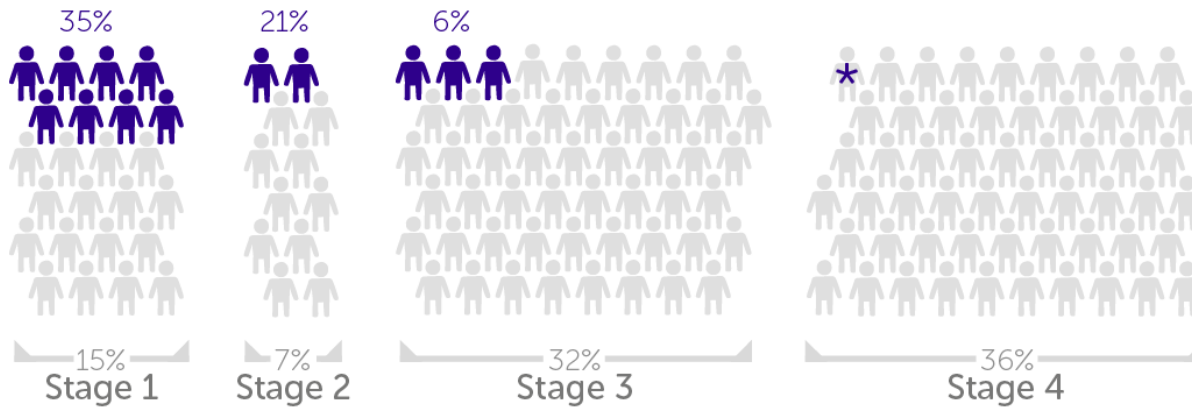


Bowel Cancer (C18-C20), Ten-Year Relative Survival Rates by Stage at Diagnosis, Former Anglia Cancer Network, 1996-2000

Early diagnosis is key in beating cancer

When diagnosed earlier more people survive lung cancer

 = People surviving lung cancer for 5 or more years



But lung cancer is most often diagnosed at later stages

Patient perspectives on early diagnosis

“It was diagnosed as malignant melanoma and I needed an operation, but it was picked up early and I am having regular checks now. If I hadn’t picked up the leaflet, it could have been months before I went to the GP”

Ronnie,
diagnosed with
melanoma in
2013

“I’m very breast aware now [...] Early detection is the key and I really want to do what I can to help get that message across”

Deborah,
diagnosed
with breast
cancer in 2007

Significant treatment savings could be made if cancers were diagnosed earlier



*Lung cancer figure is negative since the disease often comes back even when diagnosed earlier

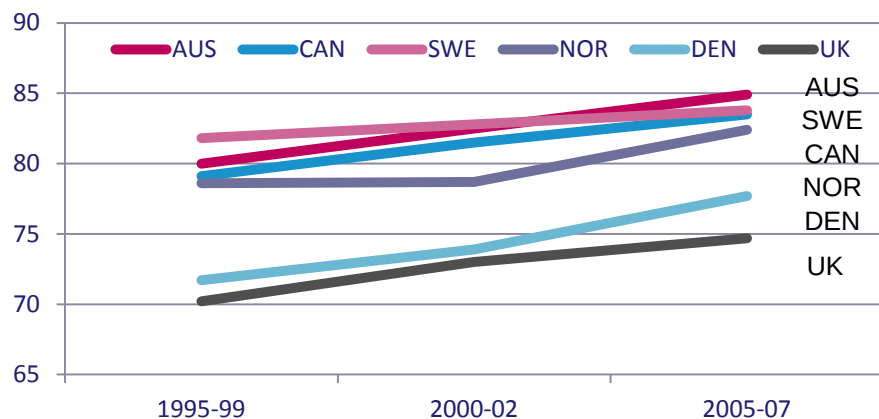
● = Treatment savings based on a level of early diagnosis comparable with the best in England

Summary

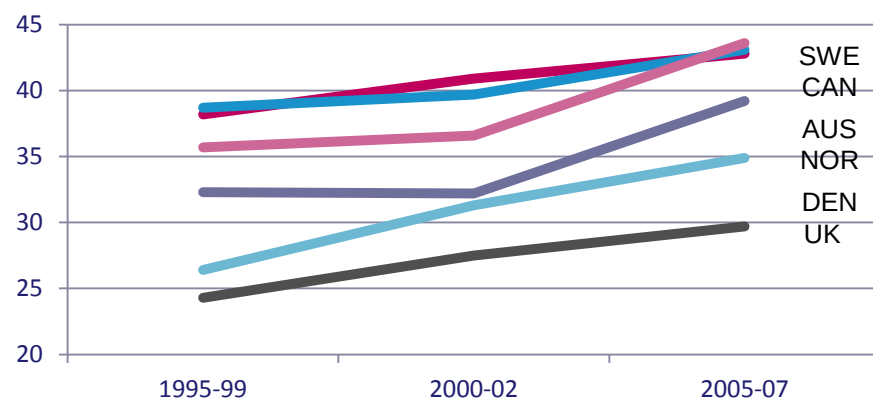
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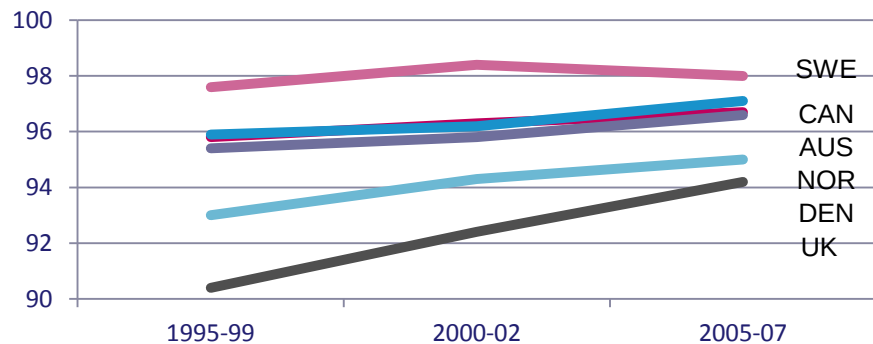
ICBP Module 1 - survival differences



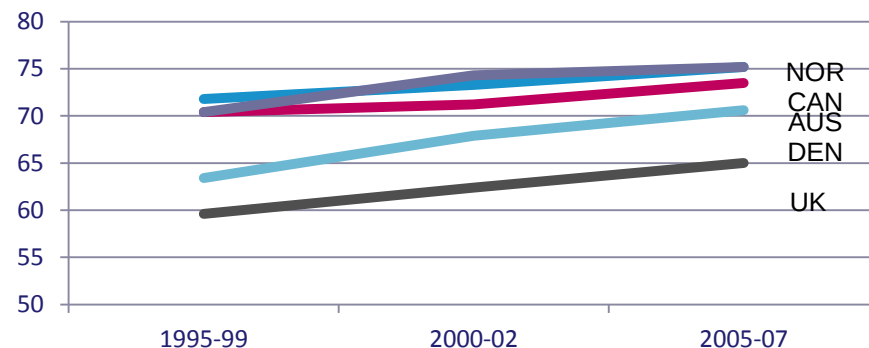
Colorectal Cancer 1yr Relative Survival



Lung Cancer 1yr Relative Survival



Breast Cancer 1yr Relative Survival



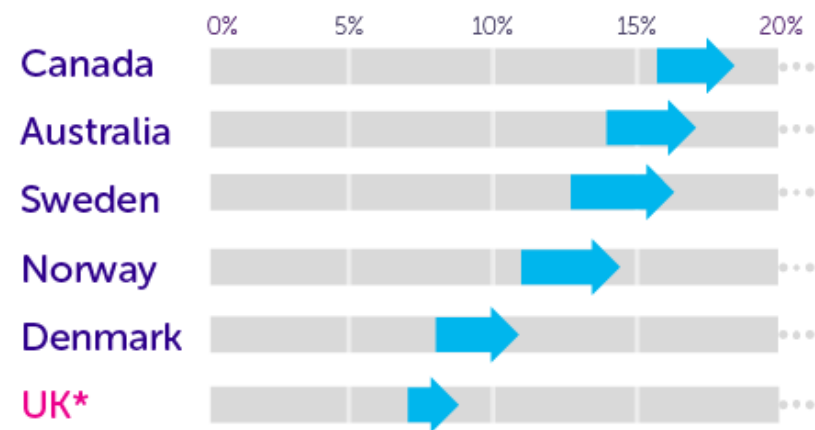
Ovarian Cancer 1yr Relative Survival

Coleman MP, Forman D, Bryant H et al. Cancer survival in Australia, Canada, Denmark, Norway, Sweden and the UK, 1995-2007 (the International Cancer Benchmarking Partnership): an analysis of population-based cancer registry data. The Lancet 2011, 377: 127-138

Progress in 5 year survival – ICBP findings

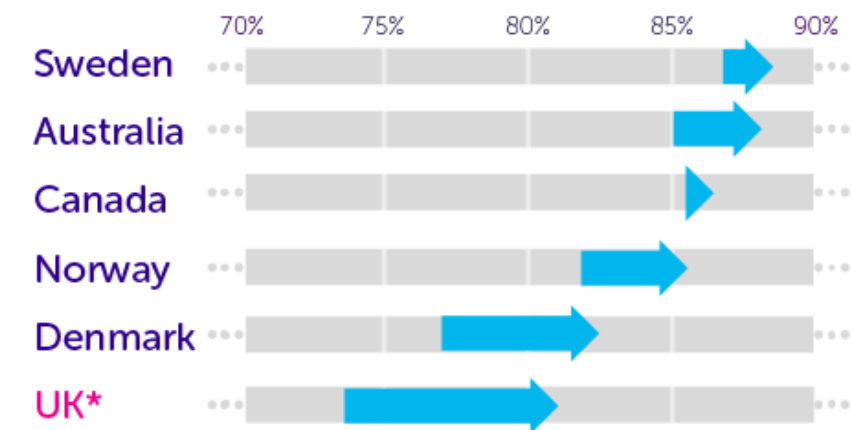
Lung cancer

5-year survival changes, 1995-1999 to 2005-2007



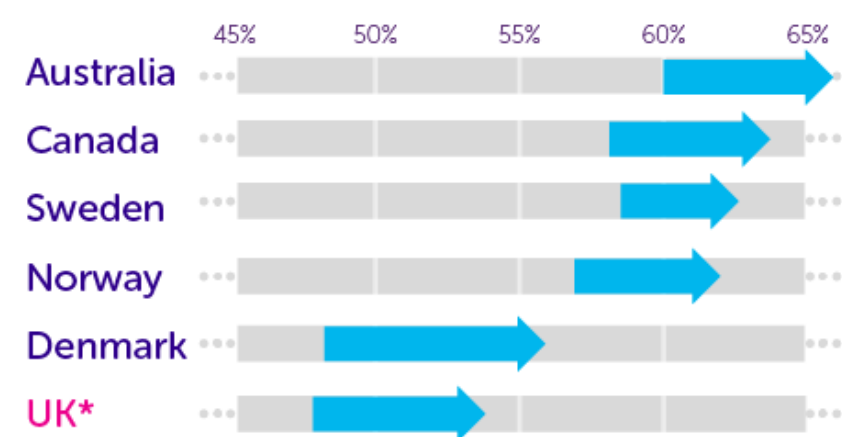
Breast cancer

5-year survival changes, 1995-1999 to 2005-2007



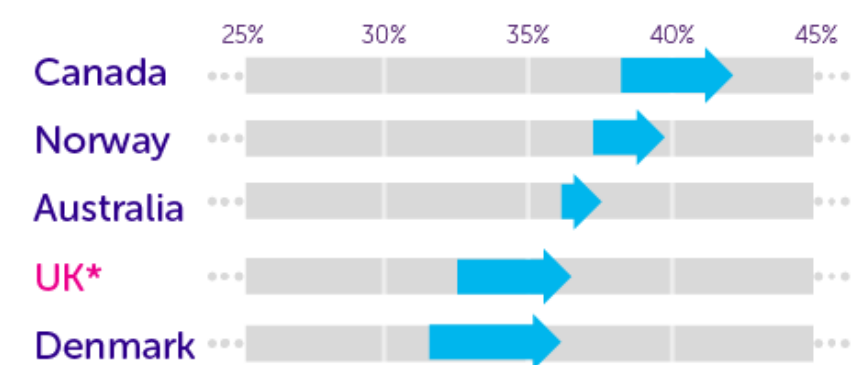
Bowel cancer

5-year survival changes, 1995-1999 to 2005-2007



Ovarian cancer

5-year survival changes, 1995-1999 to 2005-2007



Summary

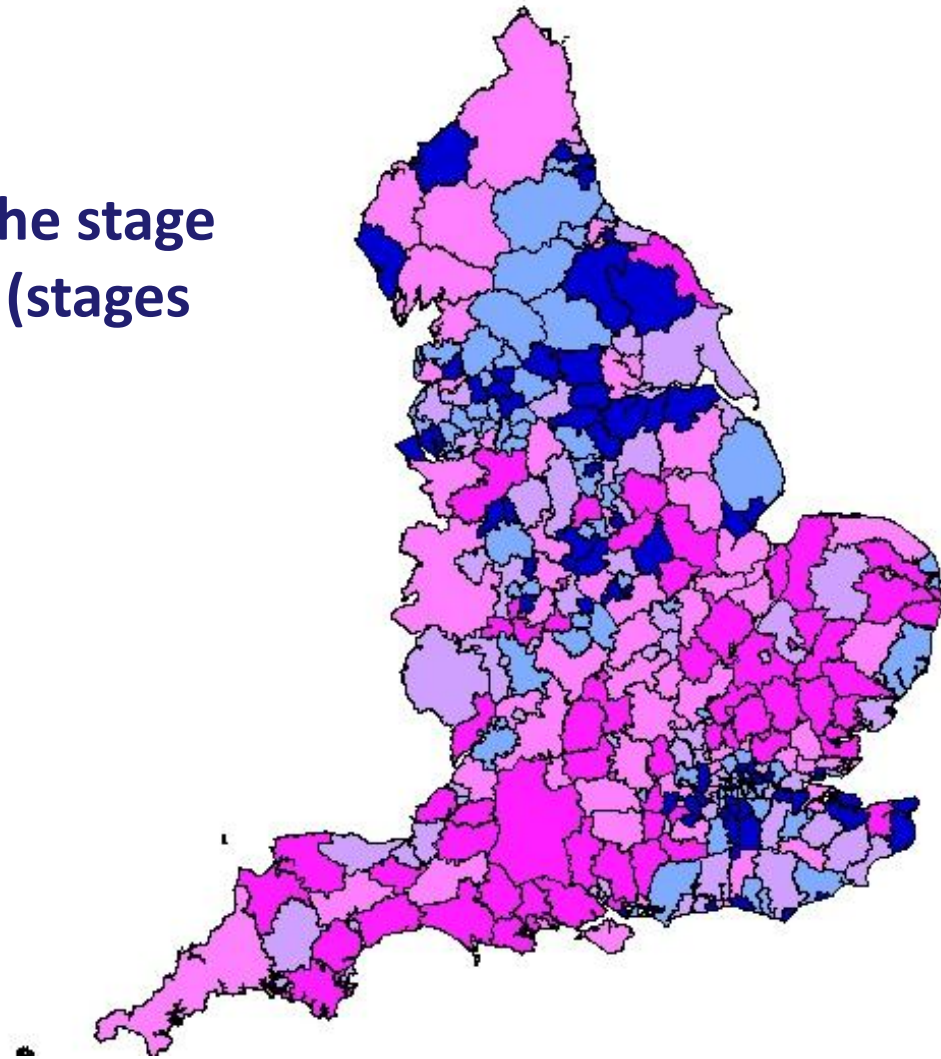
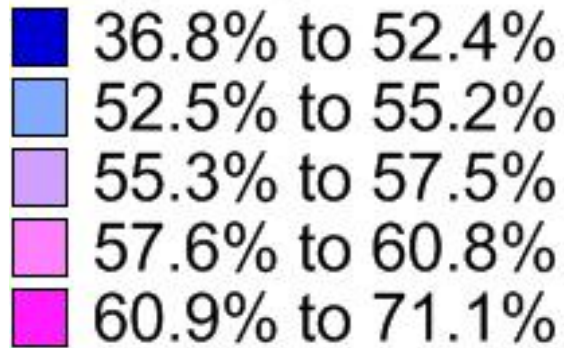
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The principles underlying earlier cancer diagnosis would also benefit outcomes in other diseases

There is wide variation in stage at diagnosis across England

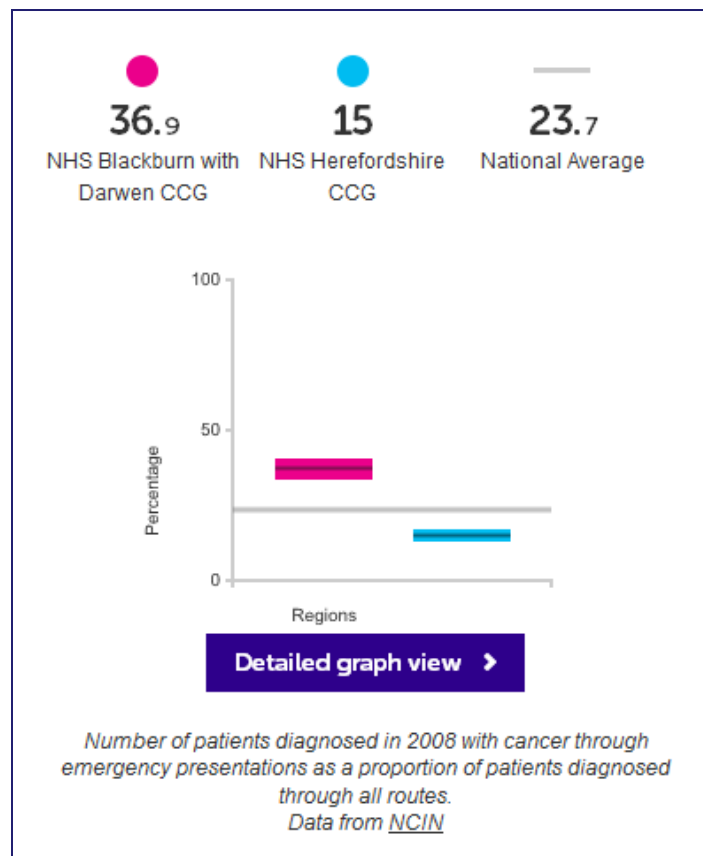
Proportion of new cancers where the stage is known, diagnosed as early stage (stages 1&2)

Early Stage Quintiles



There are substantial variations in cancer emergency presentations in England

% Emergency Presentations



Summary

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ICBP module 2 - Awareness and beliefs

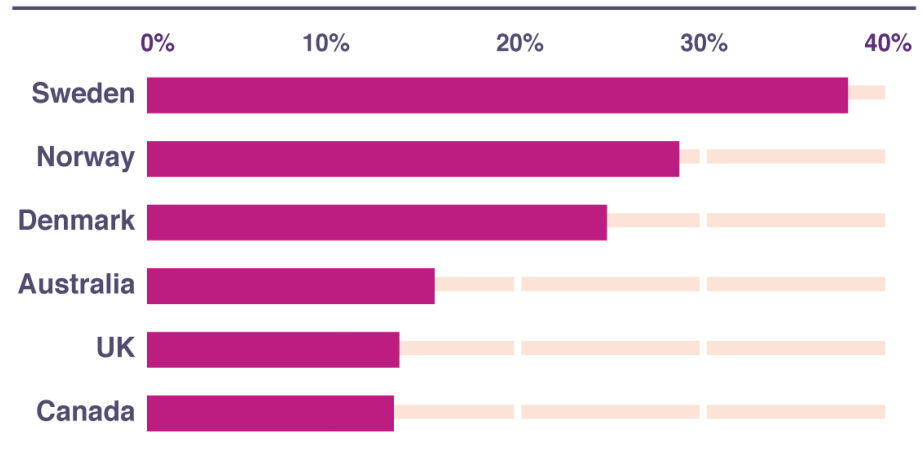
HYPOTHESIS

Lower survival rates in Denmark and UK are explained in part by lower cancer awareness and more negative beliefs about cancer

HEADLINE FINDINGS

- Not supported in all jurisdictions
- Generally positive attitudes and beliefs about cancer in all jurisdictions
- Low awareness of increasing risk with age
- **But, in the UK, people more likely to identify barriers to seeing their GP**

Awareness that cancer risk increases with age



Proportion of respondents who said that 70-year olds are most likely to be diagnosed with cancer (rather than 30-year olds, 50-year olds or people of any age)

Summary

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ICBP Module 3 - system differences

HYPOTHESIS

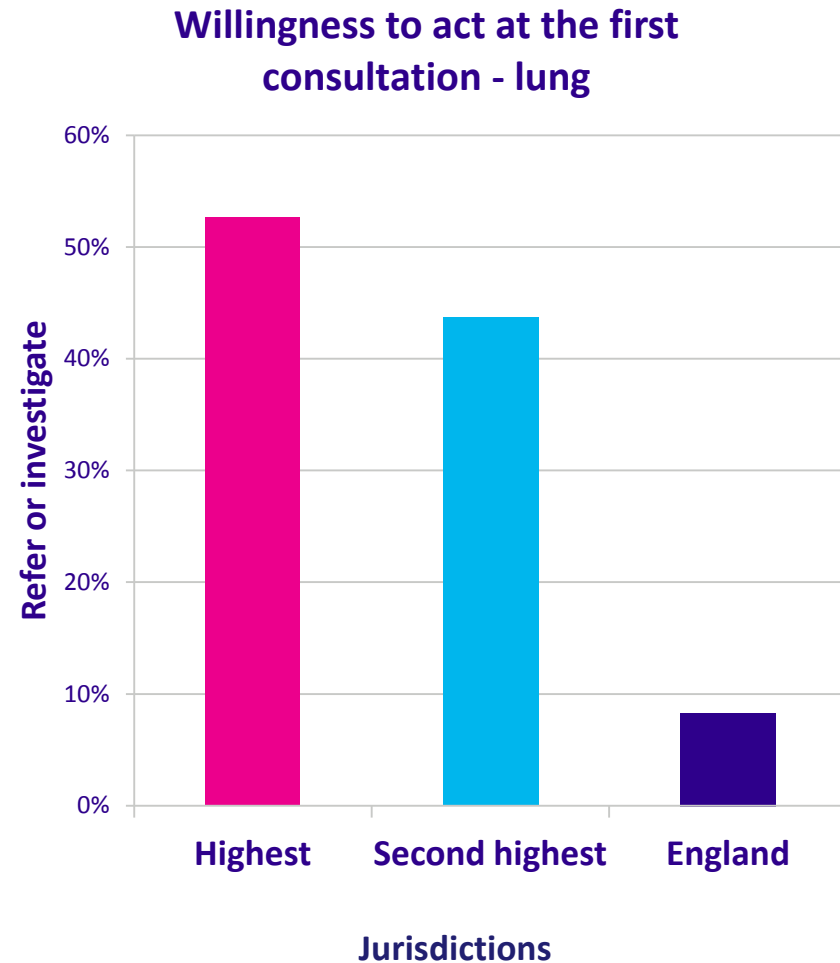
Differences in primary care systems may lead to delays and result in later stage at diagnosis, which in turn is associated with poor outcomes

PROGRESS

Latest international data suggests GPs in the UK:

- Are less likely to send a patient for tests or to refer them at their first consultation
- Report having among the lowest access to specialist advice
- Feel more strongly about protecting their patients from over investigation, and preventing a secondary care overload

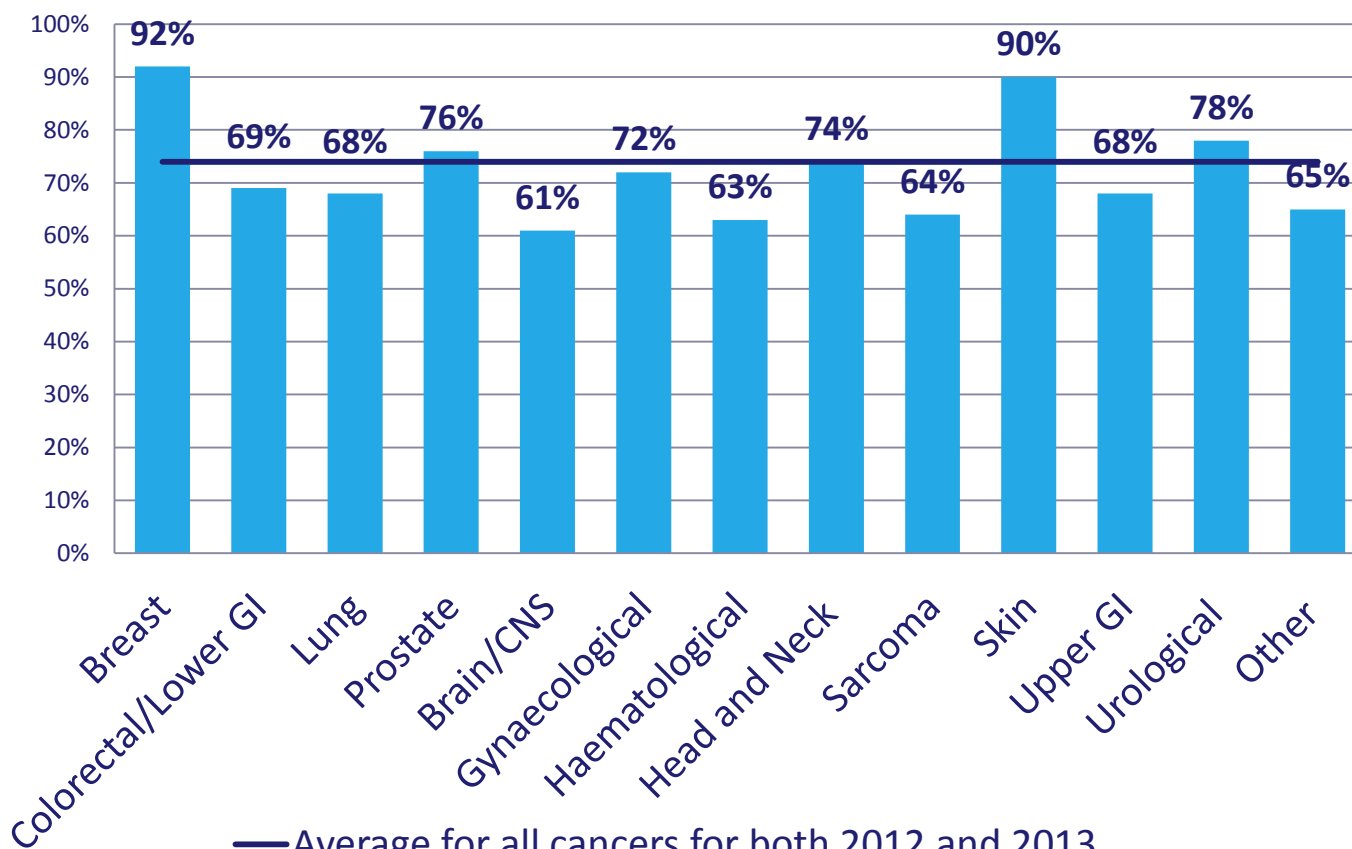
Rose PW, Rubin G, Perera-Salazar R, et al. Explaining variation in cancer survival between eleven jurisdictions in the International Cancer Benchmarking Partnership: a primary care vignette survey. BMJ Open – accepted for publication



For some types of cancer, patients visit their GP multiple times before referral for a test

Saw GP no more than twice before referral to hospital

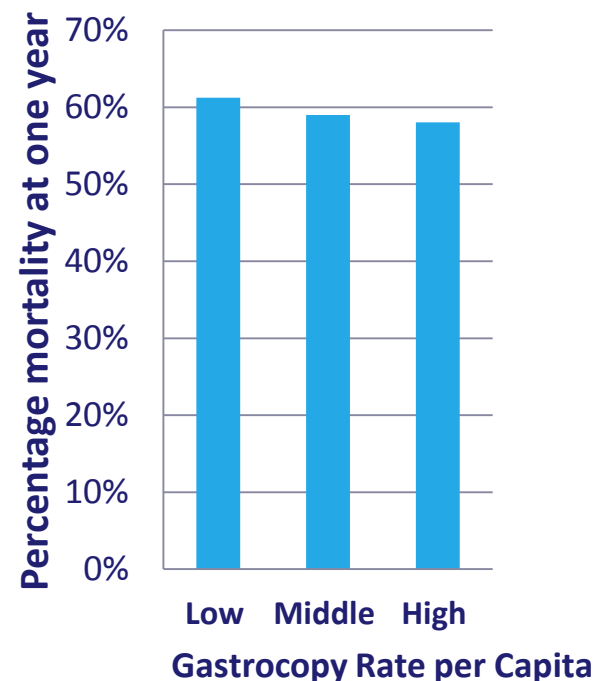
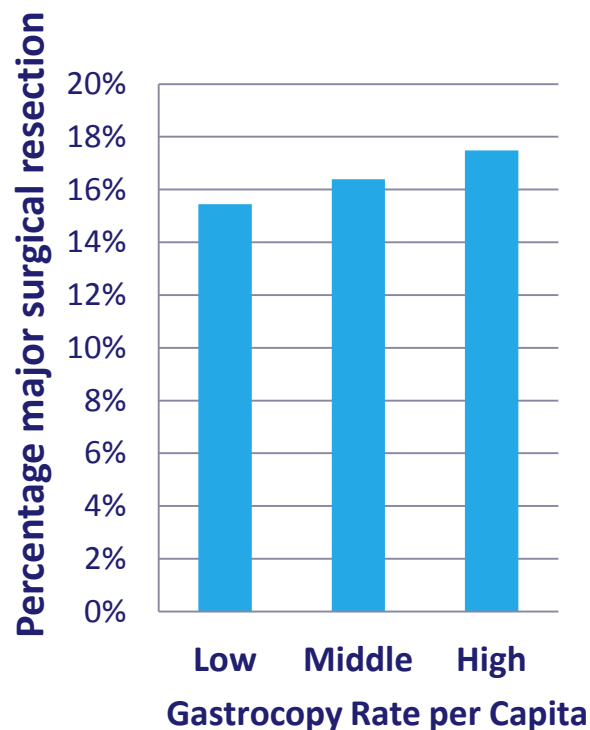
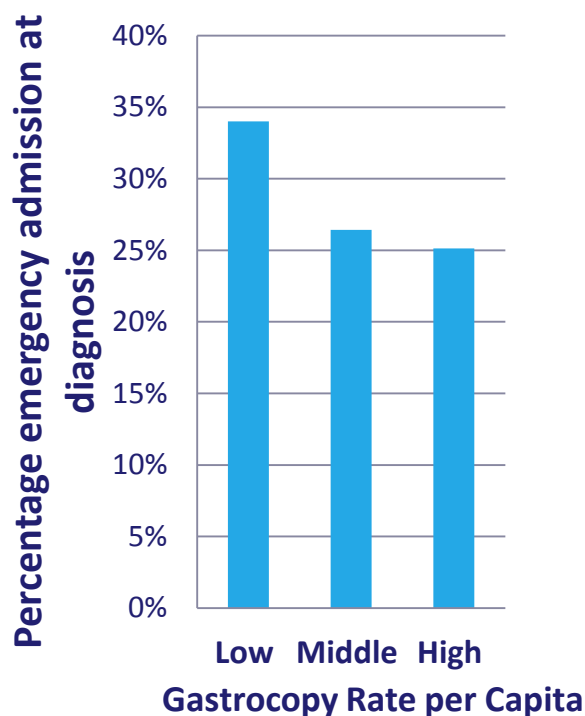
NHS England,
Cancer Patient
Experience
Survey, 2013



**More investigation
makes a difference – in
emergency
presentations...**

**...in proportion
going on to have
potentially
curative
treatment...**

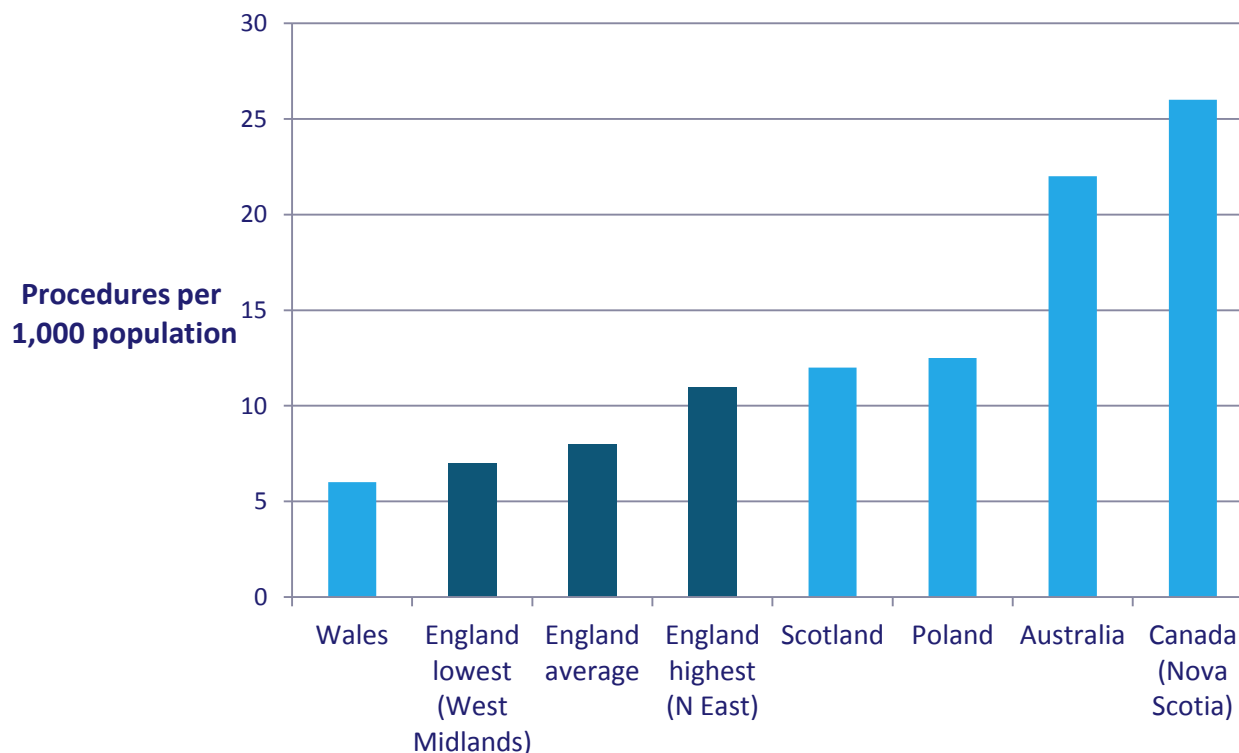
**...and ultimately in
survival**



Shawihdi M, Thompson E, Kapoor N, Powell G, Gastroscopy rate in English general practice populations: association with outcome for oesophagogastric cancer. 2014. *Gut*;63:250

International comparisons highlight lower rates of investigation in the UK

International Comparison of Crude Colonoscopy Rates
per 1,000 in 2010/2011



CRUK Early diagnosis vision

- Everyone with cancer is diagnosed and treated as quickly and effectively as possible to give them the best chance of surviving their disease and improving their experience (of treatment and care)
- 3 in 4 people diagnosed at an early stage by 2034

Key objectives

- Diagnose bowel cancer earlier through screening
- Advocate for, support the delivery of public-facing communications to achieve behaviour change
- Engage, influence and support GPs and others in primary care to achieve earlier diagnosis of cancer
- Work to streamline and innovate across the diagnostic pathway

CRUK Bowel screening campaign – London (2014)

INTERVENTIONS

- CRUK endorsement letter
- Kit enhancement pack
- Outdoor advertising

EVALUATION

- Combination of all interventions most effective

significantly increased uptake*:

- 60-69 yrs = 2.1% - 6%
- 70-74 yrs = 2.3% - 6.3%



CRUK strategies to support GPs

EDUCATION

CLINICAL DECISION SUPPORT (CDS) TOOLS

CRUK FACILITATORS



Lung Cancer Assessment Tool for Smokers

Cough	Fatigue	Dyspnoea	Chest pain	Loss of weight	Loss of appetite	Thrombocytosis	Abnormal spirometry	Haemoptysis	
0.9	0.8	1.2	1.3	2.1	1.8	4.2	4.0	4.5	Risk as a single symptom
1.3	1.0	1.4	0.9	2.3	2.8	6.5	3.6	3.9	Cough
	1.2	1.4	1.3	2.0	2.3	2.4	>10	6.1	Fatigue
		1.5	2.2	3.1	5.5	2.4	>10	6.9	Dyspnoea
			1.4	4.4	7.6	>10	>10	4.1	Chest pain
				1.7	5.0	>10	>10	*	Loss of weight
					2.7	*	*	*	Loss of appetite
						*	*	12	Haemoptysis

*The original study was not able to calculate figures for these boxes, but they are almost certainly worthy of the red shade

Lung Cancer Assessment Tool for Smokers

Diagnostics and services

CRUK commissioned endoscopy evaluation

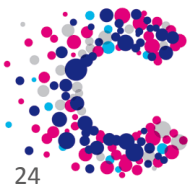
- Improve knowledge of current **capacity**
- Ascertain how **demand** is likely to grow
- Level of **resource** needed to meet growing demand and solutions for addressing the barriers/challenges



Accelerate, Coordinate, Evaluate (ACE)

The ACE Programme's objective is to

... develop a national body of evidence & evaluation that informs the operational improvement of early diagnosis cancer pathways



CANCER
RESEARCH
UK



**WE ARE
MACMILLAN.**
CANCER SUPPORT

Working across the entire health system with particular focus on:

- 1. Better prevention**
- 2. Swifter diagnosis**
- 3. Better treatment, care and after care**

Thank you