

Multi-disciplinary Diagnostic Centre

UCLH Cancer Collaborative annual event

26th June 2018

Andrew Millar
Gastroenterologist and Hepatologist

Statement of Interests
Shareholder in Medefer Ltd, Director of GI Diagnostics, Funding from Gilead, Janssen and Norgine, Member of PCUK Advisory Board

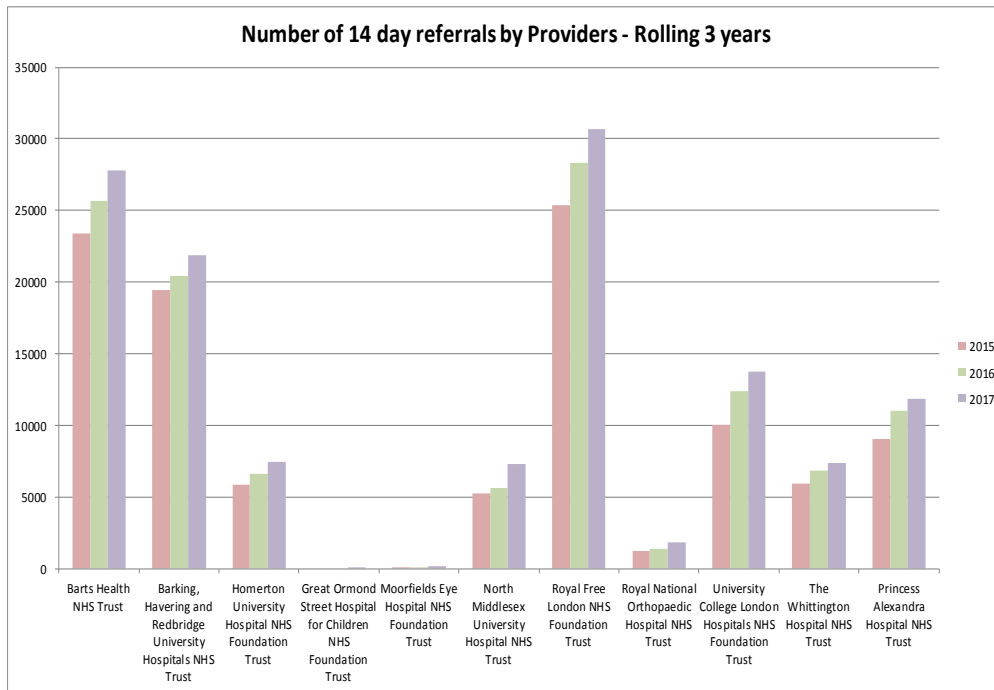


UCLH Cancer Collaborative
The Cancer Alliance for north and east London



Background

Current cancer pathways are unsustainable and not fit for purpose



In the last 3 years 2ww referrals have risen by 17%

Key findings of 2ww referrals

- NICE guidance (NG12) 2ww pathways - 3% cancer conversion
- Most cancers (around 66%) are **not** diagnosed on 2ww pathway
- A quarter (25%) diagnosed on routine pathways
- A fifth (21%) are diagnosed via A&E



What are MDCs?

MDC pathway: avoiding the hospital pinball machine

What is an MDC?	<ol style="list-style-type: none">1. MDCs - fast track diagnostic centres for patients with suspected cancer2. MDC runs within a hospital and uses current hospital infrastructure
Main Diagnostic tests	<ol style="list-style-type: none">1. CT2. Bloods3. Endoscopy4. Colonoscopy5. MRI6. PET CT7. ERCP
Benefits	<ol style="list-style-type: none">1. Named CNS contact for every patient from time referral is received2. Fast access to diagnostics for patients with non-specific symptoms
Future	<ol style="list-style-type: none">1. If shown to be beneficial will be rolled out nationally2. Opportunity to support more DIRECT and STRAIGHT TO TEST

Project overview

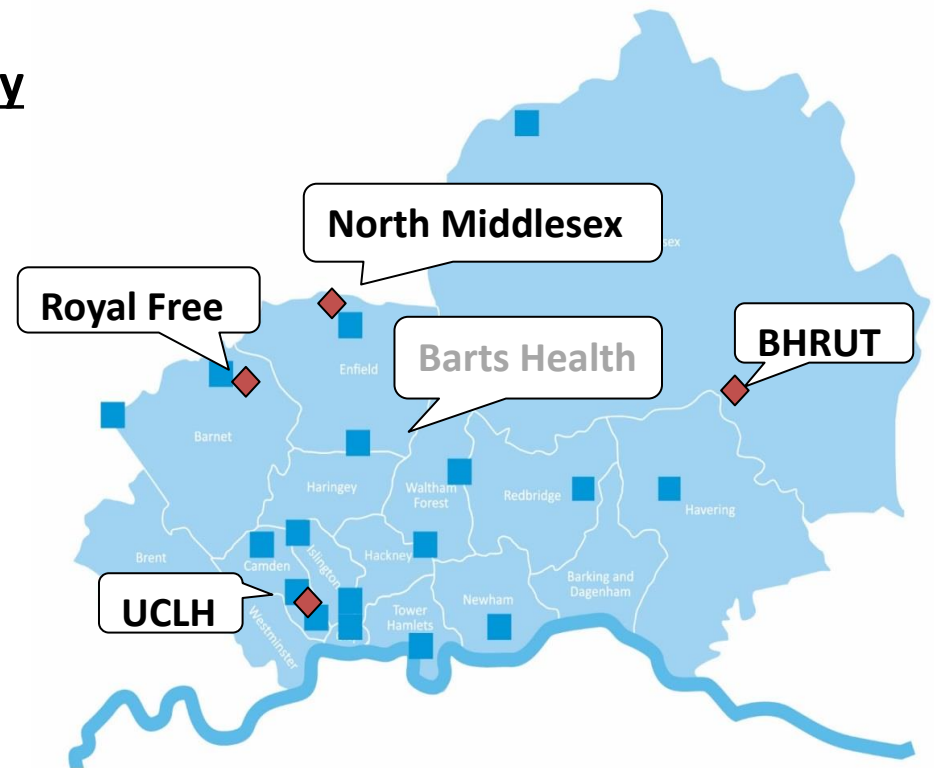
MDC referral criteria and geographic spread of MDC sites

Who to refer

EITHER Does not fit an existing 2WW pathway or unclear which 2ww pathway

OR Are too unwell to wait for a 2WW appointment - not needing admission

1. New unexplained abdominal pain
2. Unexplained weight loss
3. Painless jaundice
4. New and persistent unexplained nausea / loss of appetite
5. GP has concern /gut feeling of an underlying gastrointestinal (GI) cancer



Project overview

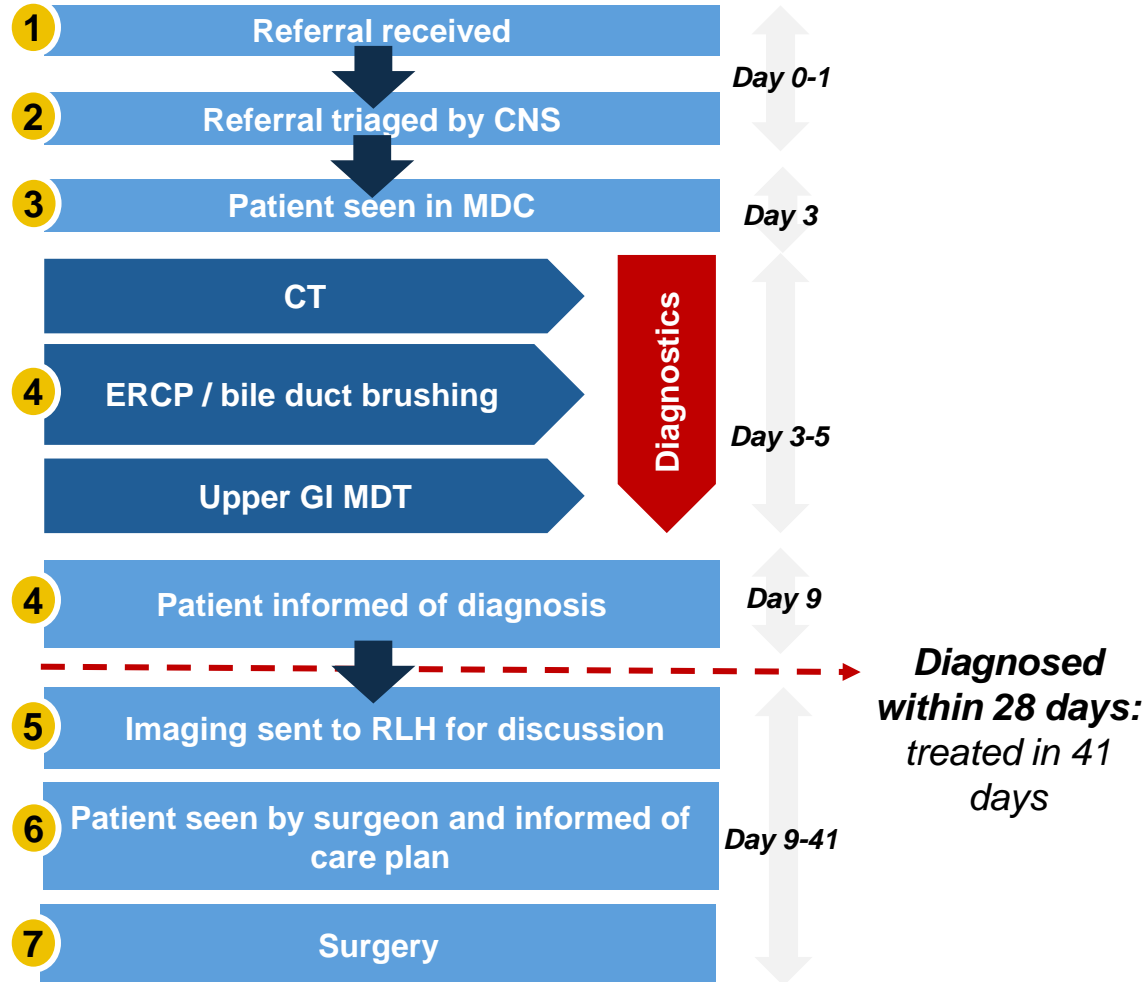
MDCs align with national and local strategy

Potential benefits of MDCs	Area of benefit	Rationale	Aligns with national strategy?	Aligns with NCL strategy?
Improve quality and outcomes	Diagnosis within 28 days	<ul style="list-style-type: none"> • Rapid access to diagnostics • Improves patient experience 	✓	✓
	Aid treatment within 62 days	<ul style="list-style-type: none"> • Earlier diagnosis in pathway increases time for treatment decisions and delivery • Will improve survival rates 	✓	✓
	Reduction in A&E cancer diagnosis	<ul style="list-style-type: none"> • Cancer diagnosis following ED presentation has poorer outcome, even when controlling for other factors¹ • Better use of hospital resources 	✓	✓
Improve patient experience	Diagnosis through appropriate setting	<ul style="list-style-type: none"> • Patients benefit from CNS support • Better access to diagnostic tests and access to specialist cancer and holistic support 	✓	✓
Reduction in cost	Reduction in number of wasted consultations	<ul style="list-style-type: none"> • Reduce number of GP visits • Reduce referrals to incorrect pathways • Meets needs of primary care 	✓	✓

1 - Plaser TR *et al* 2013; Schneider C *et al.* 2013

Project overview
Case study

Patient referred in June 2017



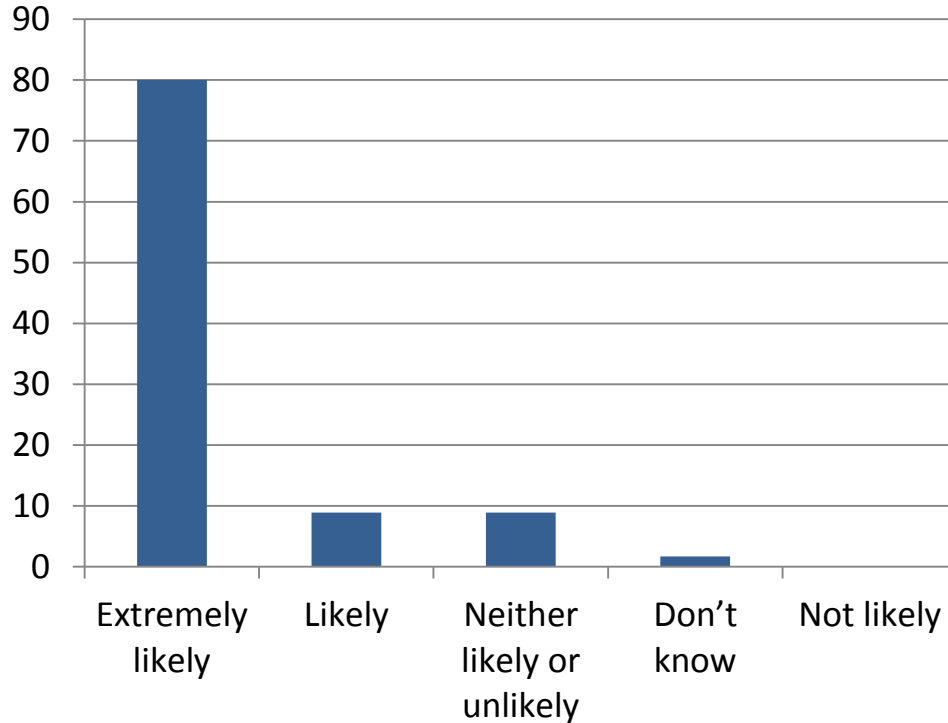
Patient experience
Patient case study

Patient perspective

<p>GP</p>	<p>‘I had a routine blood test for diabetes at my GP surgery and then received a call from the practice to say I was very anaemic,’</p> <p>‘My GP was concerned that it could be something serious, even though I felt fine, and she insisted on referring me to the multidisciplinary diagnostic centre at UCLH for a fast diagnosis.’</p>
<p>Hospital</p>	<p>‘At the MDC I met Vicky, the nurse, who asked me some questions and arranged for me to have a CT scan as well as an endoscopy and colonoscopy the following week. The consultant told me that I had bowel cancer and I would need an operation. The operation was successful – I was lucky that the cancer hadn’t spread to any other parts of my body and I didn’t need chemotherapy afterwards.’</p>
<p>Overall experience of MDC service</p>	<p>‘I had no outward symptoms of bowel cancer and feel incredibly lucky that a routine blood test flagged that there could be a problem to my GP. I am so grateful to the MDC service at UCLH for being available to make sure I could receive a speedy diagnosis and get my cancer treated quickly.’</p>

Patient experience

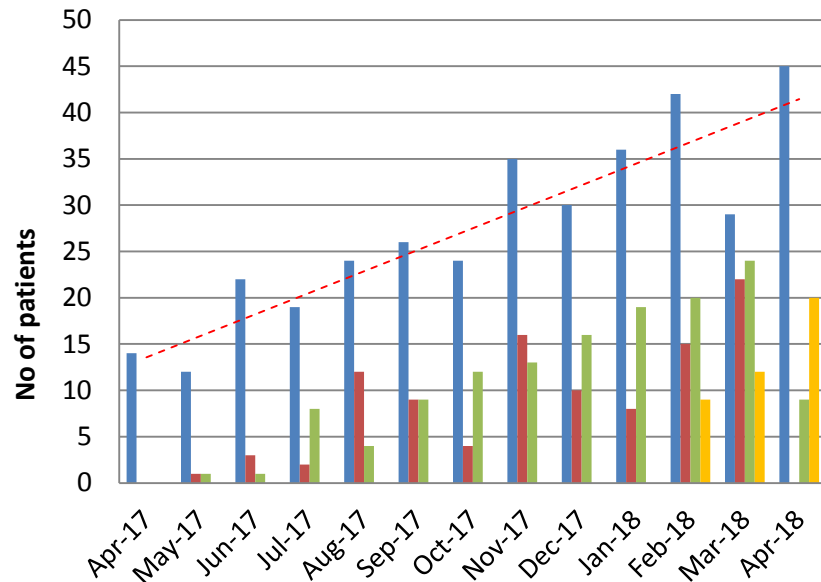
Patient data



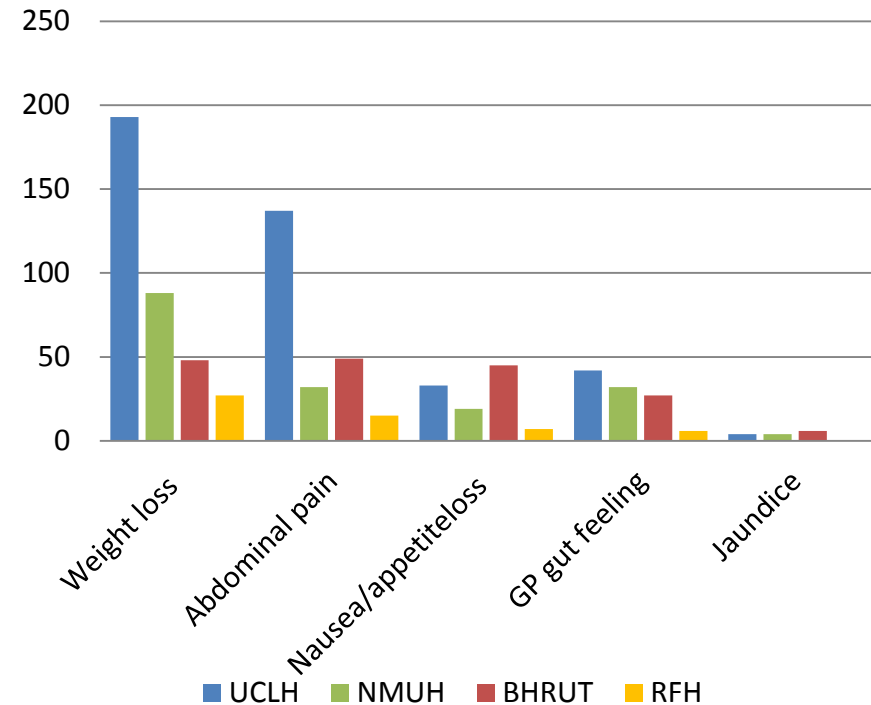
- 80% of patients are extremely likely to recommend the MDC service to family and friends
- 82.8 % felt they received their first hospital appointment as soon as was necessary
- 89.3% felt their test results were explained in a way they could understand
- 78.6% felt they waited a reasonable amount of time while attending clinics and appointments

Data

Referral numbers and reason (April 17 – April 18)



	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
UCLH	14	12	22	19	24	26	24	35	30	36	42	29	45
BHRUT	0	1	3	2	12	9	4	16	10	8	15	22	
NorthMid	0	1	1	8	4	9	12	13	16	19	20	24	9
Royal Free	0	0	0	0	0	0	0	0	0	0	9	12	20

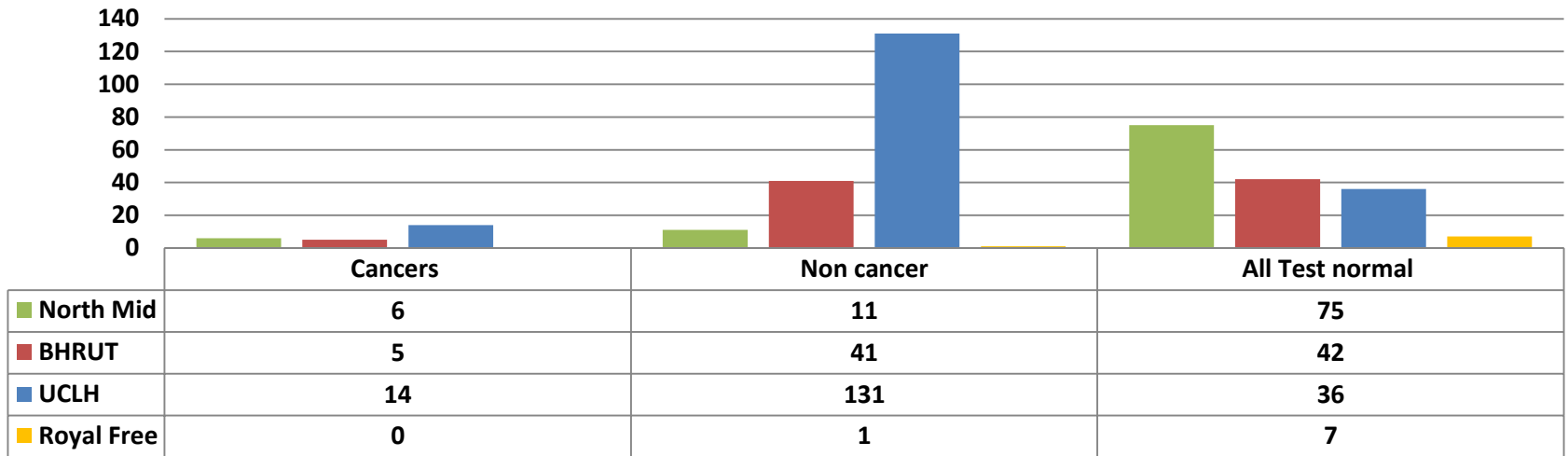


- Total referral rate on an upward trend
- Highest proportion for Weight loss: 51.4%
- Second highest for Abdominal pain: 33.47 %

Data

Diagnosis and cancer conversion rate

Diagnosis



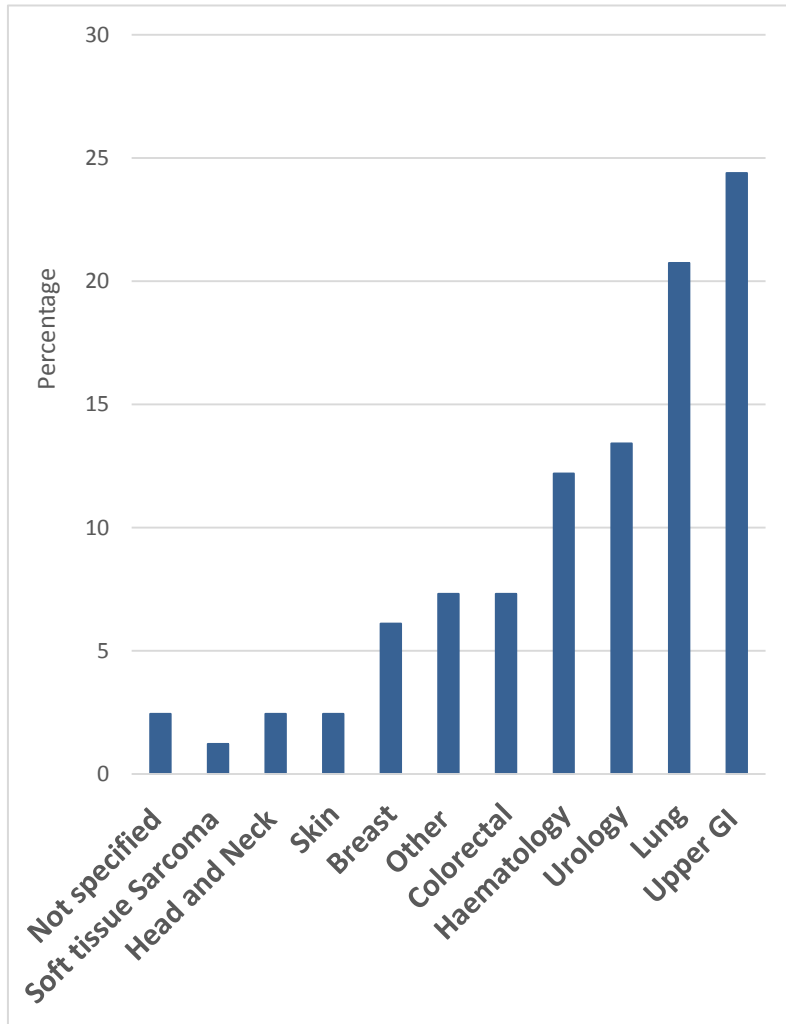
■ North Mid ■ BHRUT ■ UCLH ■ Royal Free

Cancer conversion rate

Site	Number of referrals	Cancer conversion rate	Time to cancer diagnosis (mean)
UCLH	406	3.44%	35.92
North Mid	136	4.41%	25.3
BHRUT	113	4.42%	16
Royal Free	41	0.00%	0

- Cancer conversion rate at has increased for North Mid from 3.14 % to 4.41%
- Time to cancer diagnosis at ULCH has also improved from 37.1 to 35.92 days.

Cancer Diagnosis

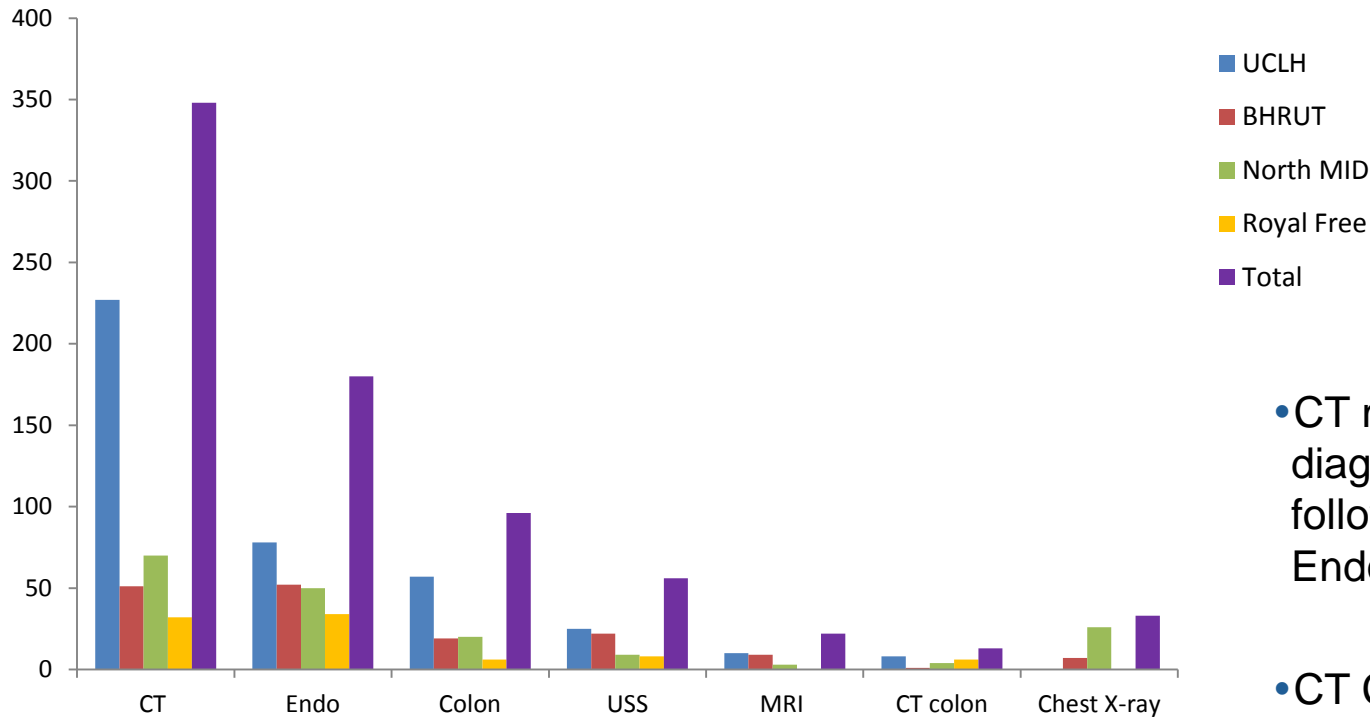


Non-cancer Diagnosis

Broad Description	N	%
Diseases of the digestive system	166	39
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	44	10
Diseases of the respiratory system	42	10
Diseases of the genitourinary system	31	7
Neoplasms (benign)	28	7
Diseases of the musculoskeletal system and connective tissue	20	5
Diseases of the circulatory system	19	5
Certain infectious and parasitic diseases	14	3
Endocrine, nutritional and metabolic diseases	14	3
Mental, Behavioural and Neurodevelopmental disorders	14	3
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	13	3
Congenital malformations, deformations and chromosomal abnormalities	6	1
Diseases of the nervous system	4	1
Diseases of the skin and subcutaneous tissue	2	0
Injury, poisoning and certain other consequences of external causes	2	0
Factors influencing health status and contact with health services	2	0
Grand Total	421	100

Data

Diagnostic tests performed in MDC (April 17 – June 18)



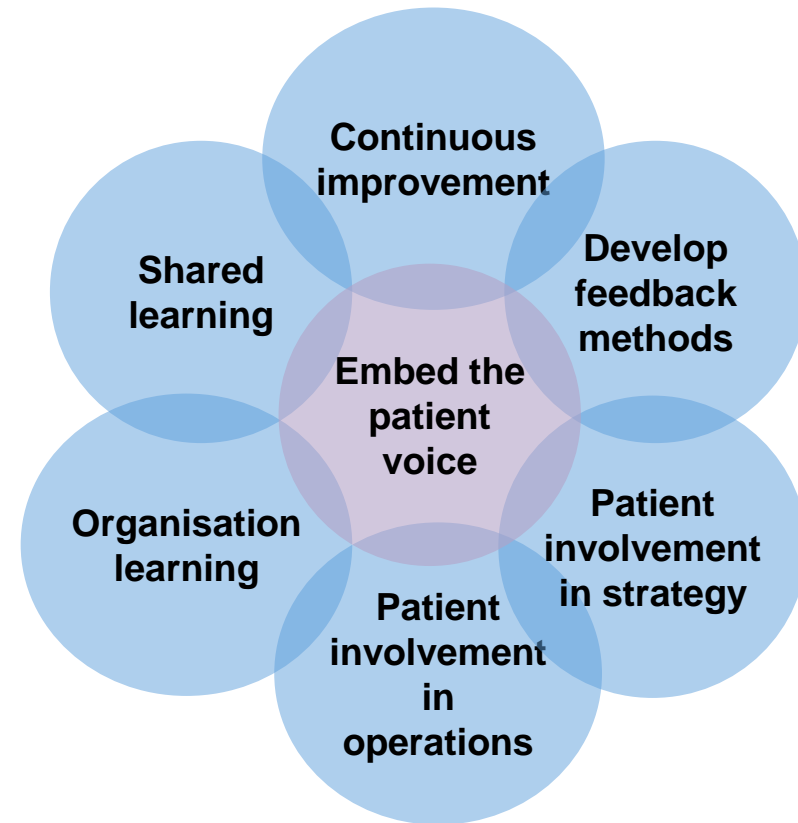
- CT most common diagnostic 49 % followed by Endoscopy 25%
- CT Colon least used diagnostic test 1.85%
- Data exclude blood tests

Site	CT	Endo	Colon	USS	MRI	CT colon	Chest X-ray
UCLH	227	78	57	25	10	8	0
BHRUT	51	52	19	22	9	1	7
North MID	70	50	20	9	3	4	26
Royal Free	32	34	6	8	0	6	0
Total	348	180	96	56	22	13	33

Embedding the patient voice

What do we need to drive patient and user involvement?

Develop feedback methods	<ul style="list-style-type: none"> • Ongoing patient feedback
Patient involvement in strategy	<ul style="list-style-type: none"> • Patient representative on Steering Group involved in strategy decisions
Patient involvement in operations	<ul style="list-style-type: none"> • Patient representative on Steering Group involved in operational decisions
Organisational learning	<ul style="list-style-type: none"> • Enable organisational learning of patient involvement through promotion of changes and success
Shared learning	<ul style="list-style-type: none"> • A clinician-led approach to sharing patient involvement developing best clinical using of informatics with emphasis on learning and knowledge transfer
Continuous improvement	<ul style="list-style-type: none"> • Involve patients in continuous improvement by implementing agreed changes and then assess impact



Key learning points

What have we learnt?

Overarching learning theme	Area of learning	Rationale
Culture	Change driven by staff	<ul style="list-style-type: none"> • Key staff involved from conception • Open communication and collaboration • Promotion of early successes
	Led by key stakeholders	<ul style="list-style-type: none"> • Buy in from Trust executives, clinical leads, matrons, admin staff and primary care • Strategic influencers promoting the project
Workforce	Training, development and education	<ul style="list-style-type: none"> • Ensure the necessary talent is available at the right time • Necessary to deliver an effective and productive team
	Flexibility and agility	<ul style="list-style-type: none"> • Open to new ways of working • Aids costs efficiencies
Analytics	Measurement metrics	<ul style="list-style-type: none"> • Enables monitoring of progress during the project • Provides evidence to quantify impact
	Sustainability of change	<ul style="list-style-type: none"> • Promotion of success from project encourages future adoption of programmes • Sharing of best practice

The Future

How MDCs / RADICs support for the Future NHS

Overarching learning theme	Development area	Action
Strategic Fit	Function	<ul style="list-style-type: none"> • Expand to include all suspected cancer not fitting 2WW • Increase A&E referrals • Develop strategies for self-referral, pharmacy referral
	Integration with Primary Care	<ul style="list-style-type: none"> • Integrate with primary care DTT testing – patient support for test and if positive result • Potential for primary care clinicians to be MDC clinicians
Workforce	Training and development	<ul style="list-style-type: none"> • Define training required for MDC clinician and CNS • Structure of whole MDC team (Danish model)
Analytics	Growth and learning	<ul style="list-style-type: none"> • Focus for research into biomarkers • Test bed for use of AI in diagnosis
	Economic Evaluation	<ul style="list-style-type: none"> • Ensure MDC delivers value for money