



Digitally Assembled Referral Toolkit (DART) Improving the quality and safety of suspected cancer referrals

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Background – Why DART?

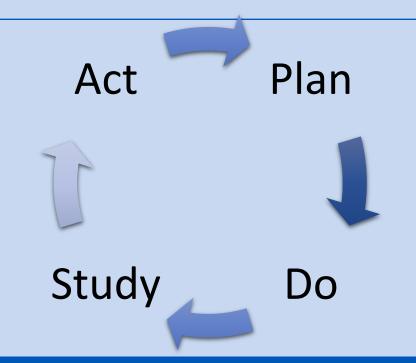
- >30,000 2-week wait referrals from primary care in last 12 months
- 2016 audit 48% referrals don't meet minimum criteria
- Boxes not ticked can lead to delayed investigation / assessment
- Concerns from practices regarding delayed referrals / patient safety





Aim

Create a 'standard' for the two-week wait referrals process that improves the safety and quality of referrals by increasing the number of correctly completed referral forms to 100% within three months of introduction







Plan

Preliminary analysis of process variation at x11 GP practices:

- To process forms: 'Clicks' mean = 20, 'Time' mean = 96secs
- •8 practices had recent SEA due to delayed/missed referrals
- GPs regard Word forms difficult to access / time consuming
- Handover ('task') issues most common reason for delays





Do - DART - Towards a referrals standard

- Digitally Assembled Referral Toolkit (DART)
- Centrally hosted forms, centrally updated, easily scalable
- Forms quick / easy to complete
- Forms remind clinicians if core clinical information incomplete
- Automatic setup of task attributes (for safer handover)
- Reduced risk of delayed referrals
- Acceptable to clinical and administrative staff

🏋 2 Week Wait Referrals.			×	
Other Details Exact date & time 💌 Mon 21 /	Aug 2017 🔽 18:45 🥙 🗙			
Write Referral Assemble Form Help Page	e		2ww Skin referral questionnaire v2	
0	igitally Assembled Referral Toolki	t (DART)	Enter values into the 2ww Skin referral	
	2 Week Wait Suspected Cancer Refer	rals	questionnaire v2 questionnaire	
Ste	p 1: ALL Referring clinicians complete clinic	al questions		_
Skin	2ww Skin ref Upper Gl	🗩 2ww UpperGI		
Breast	2ww Breast r	🖗 2ww Lung ref		
Gynae	🛠 2ww Gynae r Thyroid	🖗 2ww Thyroid		
Lower GI	2ww Lower Sarcoma	2ww Sarcom		
Urology	2ww Urology Oral	🞯 2ww Oral ref		
ENT	2ww ENT refe CNS	2ww CNS ref		
Neck Lump	2ww NeckLu Haematology	2ww Haem re		
	НРВ	🔆 2ww HPB ref		
IMPORTANT REMINDER: After co	mpleting clinical questions, please ALWAYS	S click 'SAVE FINAL VERSION' THANK YOU.		
	TASK SECRETARY PRINT LEAFLE	T.		
	Launch 2ww	•		
			Show recordings from other templates	
			Show empty recordings	
	Information Print <u>S</u> uspend	Ok Cancel Show Incomplete Fields		

Suspected urology cancer referral questionnaire	
N.B - Please note that up to date patient contact details and a telephone numb patient can be reached during office hours (08.00 am - 17.00 pm) are essential offer your patient a date within seven days of your referral.	
Referral Information – Suspected Cancer (please select)	
1 Referral Information – Suspected Cancer	
⊖ Prostate	ج 🛃
OBladder	3
⊖ Renal	
⊖ Testicular	
⊖ Penile	
2 Imaging done?	
⊖ Yes	چ 🔁
⊖ No	ß
Considerations: Consider non-urgent referral for bladder cancer in people aged 60 and over with re persistent unexplained urinary tract infection and microscopic haematuria that does criteria.	
13 Additional Comments:	
	چ 河
	-

2 Week Wait Referrals.

Other Details... Exact date & time 🔻 Mon 21 Aug 2017 💌 18:45 🤎 🗙

Write Referral Assemble Form Help Page

Assemble form

Step 2: Clinician or secretary assemble form for emailing to RBS or attaching to a 'Choose and Book' e-referral

	Assemble Word Referral (To email)	Assemble Word Letter (attach to Choose and Book)		Assemble Word Referral (To email)	Assemble Word Letter (attach to Choose and Book)	
Skin	New 'Hospital'	A New 'Two We	Upper Gl	塔 New 'Hospital'	🔕 New 'Two We	
Breast	🏜 New 'Hospital'	lange New 'Two We	Lung	🌉 New 'Hospital'	lange New 'Two We	
Gynae	New 'Hospital'	lange New 'Two We	Thyroid	New 'Hospital'	lange New 'Two We	
Lower Gl	New 'Hospital'	lange New 'Two We	Sarcoma	New 'Hospital'	🕼 New 'Two We	
Urology	New 'Hospital'	lange New 'Two We	Oral	New 'Hospital'	la New 'Two We	
ENT	New 'Hospital'	New 'Two We	CNS	New 'Hospital'	la New 'Two We	
Neck Lump	₩ New 'Hospital'	A New 'Two We	Haematology	New 'Hospital'	🔊 New 'Two We	
			НРВ	🎽 New 'Hospital'	la New 'Two We	
	•••••		ULATED WITH AL		ton to launch 'Choose and Book' EFORE SENDING. THANK YOU	
						Show recordings from other template

Print

Information

New 'Hospital' Word referral to 2ww using 2WW Urology Proforma

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Create a new 'Hospital' Word referral to 2ww using the 2WW Urology Proforma template



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Cancel

Show Incomplete Fields

Ok

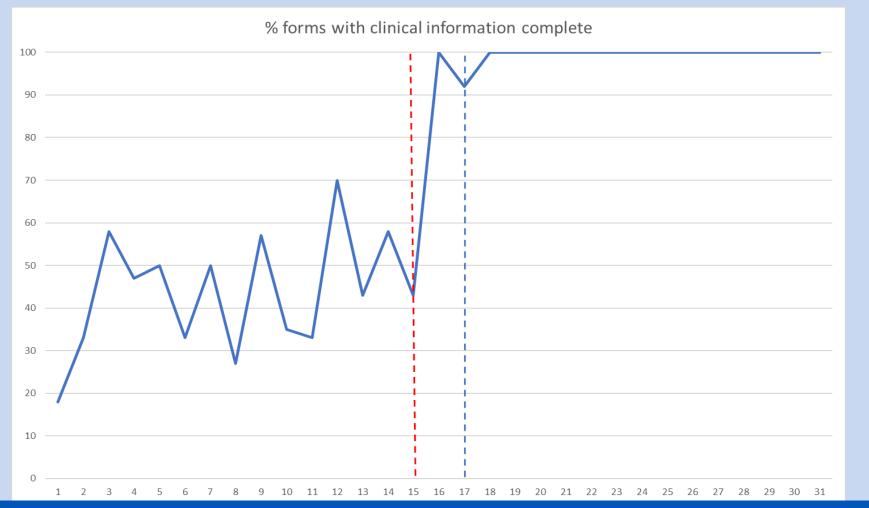
Suspend

Please confirm the patien	it is aware of the possible	diagnosis of cancer?	Yes
Please confirm the 2 wee	k wait patient information	leaflet has been given?	Yes
		o attend an appointment within	n the next Yes
14 days? If not, refer who Please confirm the patien	en willing and able to atter it is fit for straight to test?	nd	Yes
Referral Information – Su	spected Cancer: Pros	state	
Please write results o	f the following investi	gations for Prostate, Blad	Ider and Kidney referrals:
PSA	WBC	Creatinine	eGFR
25 Jan 2017, 200 ug/L	25 Jan 2017, 100	25 Jan 2017, 45 umol/L	25 Jan 2017, 3
	10^9/L		mL/min/1.73m*2
Imaging done: Yes	10^9/L		mL/min/1.73m*2
Imaging done: Yes Prostate Cancer:	10^9/L		mL/min/1.73m*2
Prostate Cancer:	10^9/L on digital rectal examination	on Yes	mL/min/1.73m*2
Prostate Cancer: Prostate feels malignant of			mL/min/1.73m*2
Prostate Cancer: Prostate feels malignant of	on digital rectal examinatio	nge* Yes	mL/min/1.73m*2 NHS Number: 911 111 1119





Study impact – Clinical information completed



	Baseline N=210	At 3/12 N=172
Clinical info	44 %	100 %





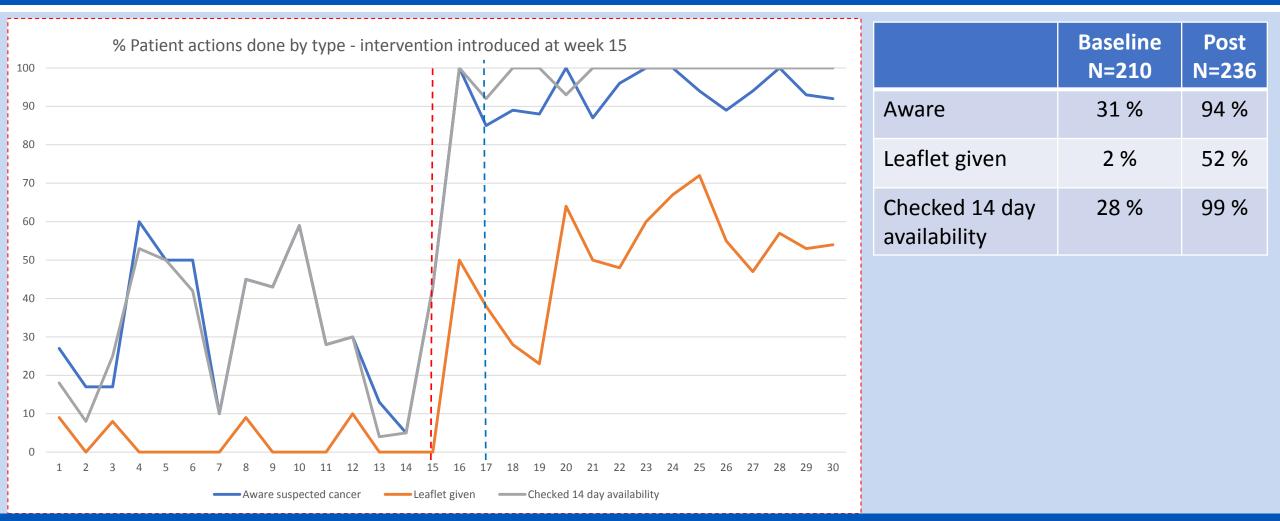
Study impact – 'blue box' actions

Please confirm the patient is aware of the possible diagnosis of cancer Please confirm the 2 week wait patient information leaflet has been given Please confirm the patient is available and willing to attend an appointment within the next 14 days If not, refer when willing and able to attend Please confirm the patient is fit for straight to test





Study impact – 'blue box' actions







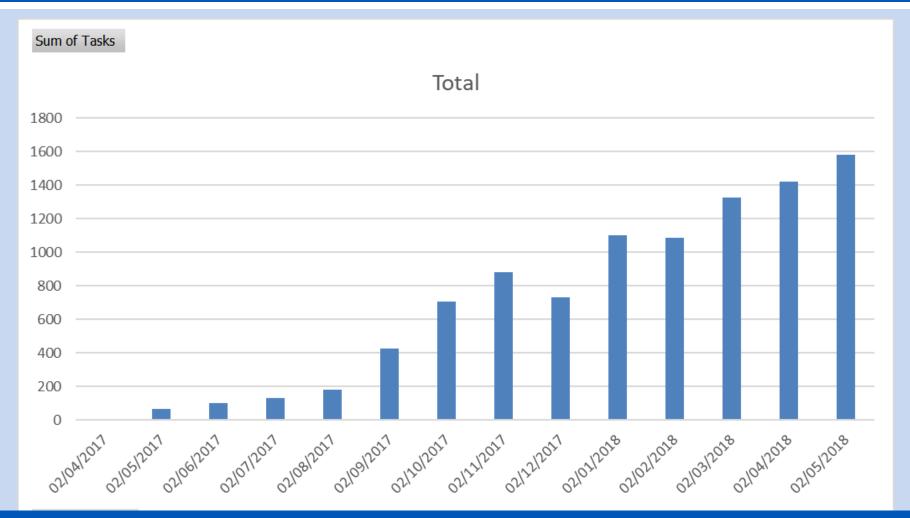
Study impact – time and cost savings

- Time to process forms reduced from 96 to 35 secs
- Clicks reduced from 20 to 14
- >500 hours freed up processing >30,000 forms (2016)
- Potential saving of >£100,000 annually





DART – City-wide roll-out





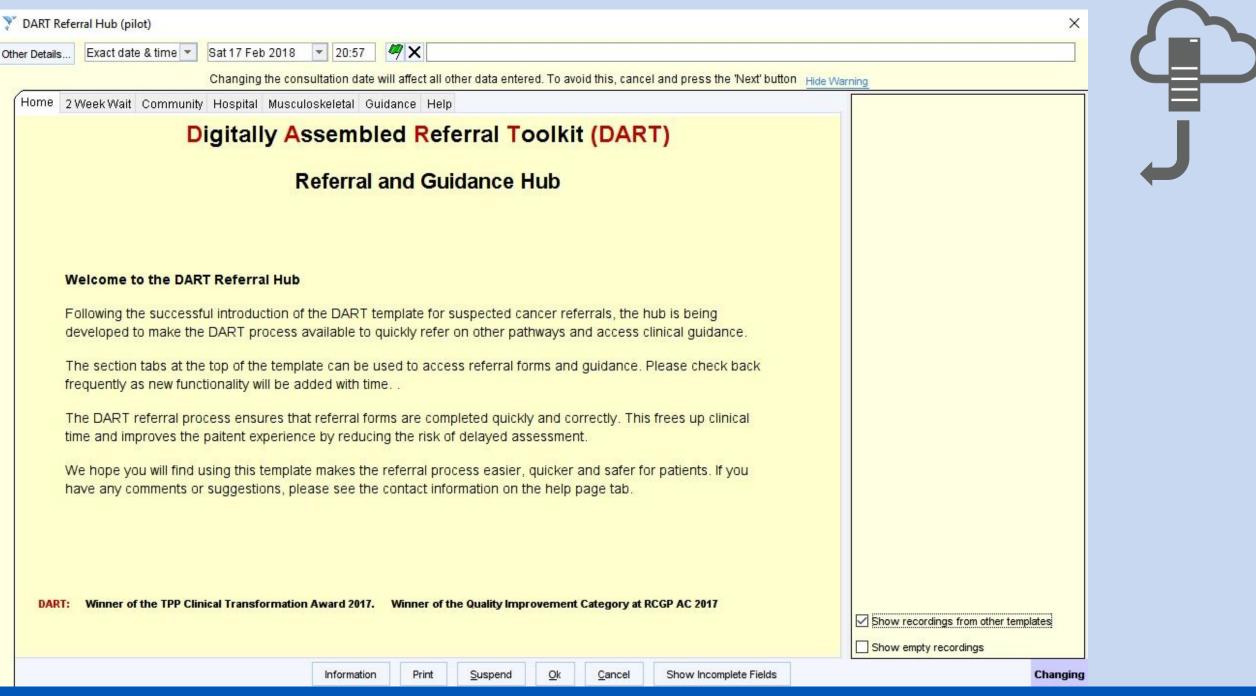


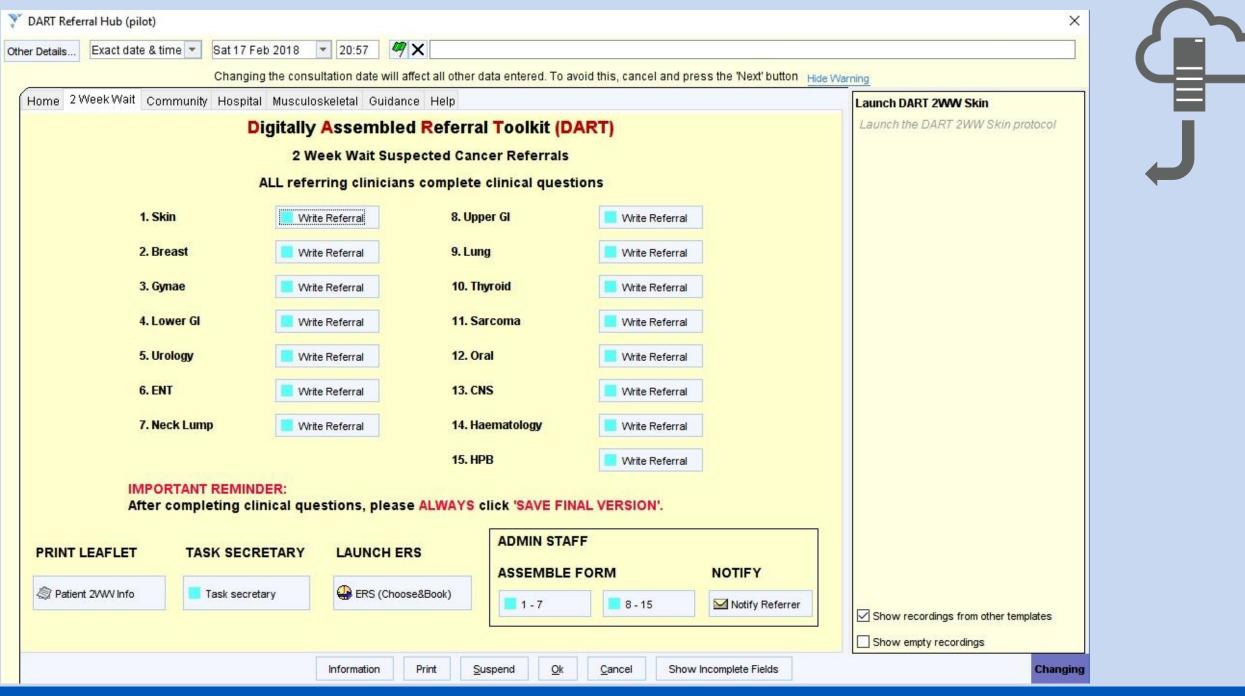
The future – DART Referral Hub

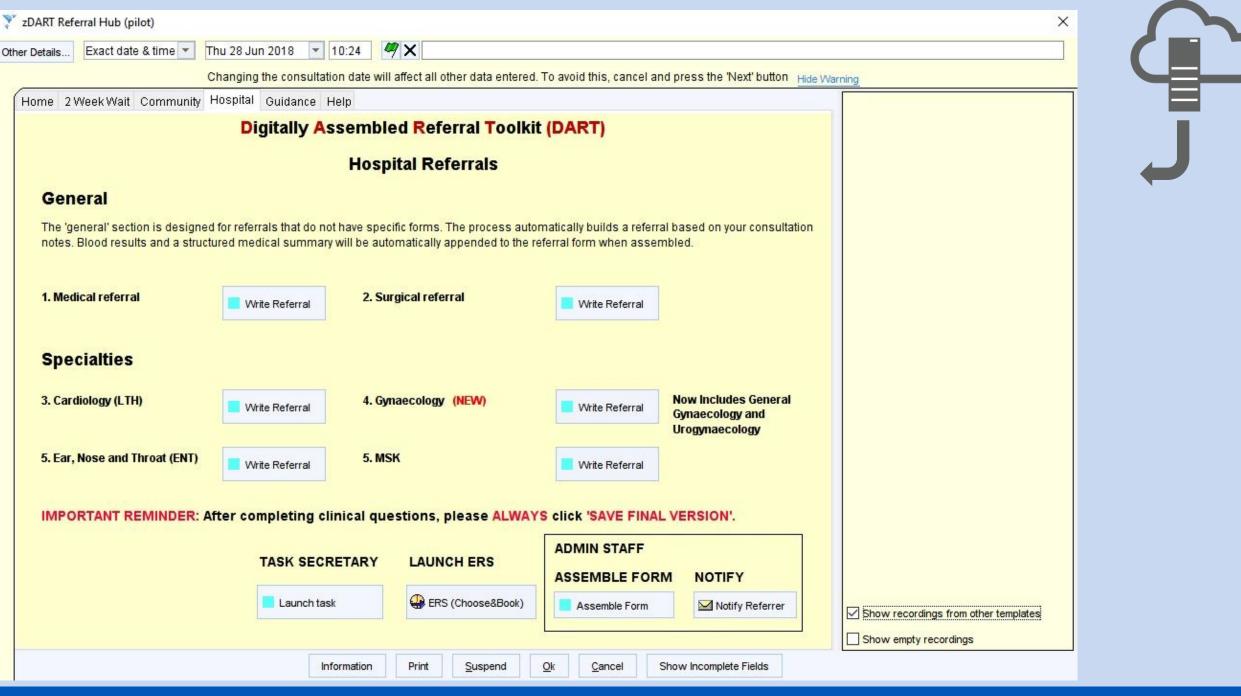
Sections for planned care pathways (hospital / community)

• No requirement for referral letter – notes auto-populated

• Includes new 'Patient Summary Record'







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Ca	rdiology Referral	
1	Please choose the clinic you wish to refer to	
	1. General Cardiology	, ⊘∓
	2. Valve Clinic	B
	3. Inherited Cardiac Conditions	Contraction of the
	4. Electrophysiology (EP)	
	☑ 5. Heart Failure Clinic	
	6. Atrial Fibrillation Clinic (AF)	
	7. Rapid Access Chest Pain	
2	Essential investigations prior to referral: All Referrals: 12 Lead ECG, FBC/U&E/TFT/LFT (recent - last 3 months). He Failure: Also add BNP. Atrial Fibrillation: Also add Clotting	art
	Please confirm that these tests have been completed or have been requested?	
	● Yes	, Ø∓
	⊖ No	B
7	Heart Failure Clinic Referral Streams	
	● a. Patients with new suspected symptoms of heart failure, accompanied by a measurement of their NTproBNP	, ⊘∓
	🔿 b. Patients with known diagnosis of LVSD and worsening symptoms	3
	\bigcirc c. Patients with known LVSD and need for further optimisation of care (medications or device therapy)	WHITE S
10	Clinical Details Please note that the notes that you have written from the current consultation and previous two consultations will be automatically inserted into the referral form. If you wish to add any further pertinent clinical information please do so	here:
		Ø∓
		B
11	Does the patient require an interpreter?	
	⊖ Yes	Ø∓
		3

Patient Summary Record (Please note this summary has been automatically assembled using coded information in the patient record)

Surgical	pre operative summar	/ information	
Produced	d by Dr Robert Eastha	m during referral of patient for surgical opinion on 17 Feb 2018	

Patient Demogra	phics		2017
Patient Name	Miss Tilly Test	Consultant	
Address	19 Iron Stone Gardens, Leeds, West Yorkshire, LS12 6LH	Date of birth Age	27 Jan 1964 54 y
NHS No.		GP	Dr Mark Fuller
Gender	Female	Home Tel	0113 356 9875
Email		Mobile Tel	07811 160351
Ethnicity		Work Tel	
Main Language	Using British sign language	Interpreter Reg	

Emergency Con	tacts 1 st Contact (N	1 st Contact (NOK)		d Contact (Carer)	
Name	Ms Jenny Tes	st		A	
Address	19 Iron Stone 6LH	on Stone Gardens, Leeds LS ⁷			
Home Tel	01131234567	8			
Mobile Tel					
Work Tel					
Relationship	Daughter	ughter			
Details of any A	nticoagulant/ Antiplat	elet drugs issued in	last 6 mon	ths	
Issued	Drug name	Dose	Quantity	Days duration	
06 Nov 2017	Warfarin 1mg tablets	use as directed	28 tablet	28	
13 Nov 2017	Warfarin 1mg tablets	use as directed	28 tablet	28	
20 Nov 2017			28 tablet	28	

Cardiovascular System	Yes	No	Latest Entry
Angina	Yes		21 May 2017, Stable angina
Heart Attack	Yes		10 Nov 2017, Heart failure with reduced ejection fraction
Rhuematic/Scarlet Fever or Heart murmur	Yes		21 May 2017, Scarlet fever
Hypertension	Yes		21 May 2017, Essential hypertension
Hypotension		No	
FH Heart problems		No	
Heart Surgery		No	
CHD/IHD	Yes		21 Dec 2017, Posterior myocardial infarction NOS
Anticoagulants/Antiplatelets in last 12M	Yes		20 Nov 2017, Warfarin 1mg tablets
AF	Yes		21 May 2017, Atrial fibrillation
Pacemaker		No	
Thrombosis		No	
Respiratory System	Yes	No	Latest Entry
Asthma/COPD/Emphysema	Yes	110	24 Aug 2016, Chronic obstructive lung disease
Persistent Cough		No	
Sleep breathing problem	Yes		21 May 2017, Obstructive sleep apnoea
Tracheostomy		No	
Requires oxygen at home		No	

Yes

Other

21 May 2017, Obstructive sleep

apnoea





Conflict of interests and useful resources

Thanks for listening

Conflict of interests: None

Useful YouTube video:

Cardiology referral demo video: https://rebrand.ly/HubCardiology Contact: Dr Rob Eastham Email: r.eastham@nhs.net