



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

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Background – Why DART?

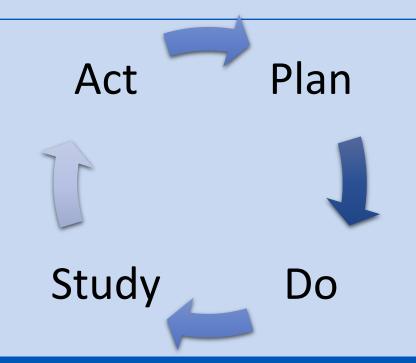
- >30,000 2-week wait referrals from primary care in last 12 months
- 2016 audit 48% referrals don't meet minimum criteria
- Boxes not ticked can lead to delayed investigation / assessment
- Concerns from practices regarding delayed referrals / patient safety





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

Х

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



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Cancel

Show Incomplete Fields

Ok

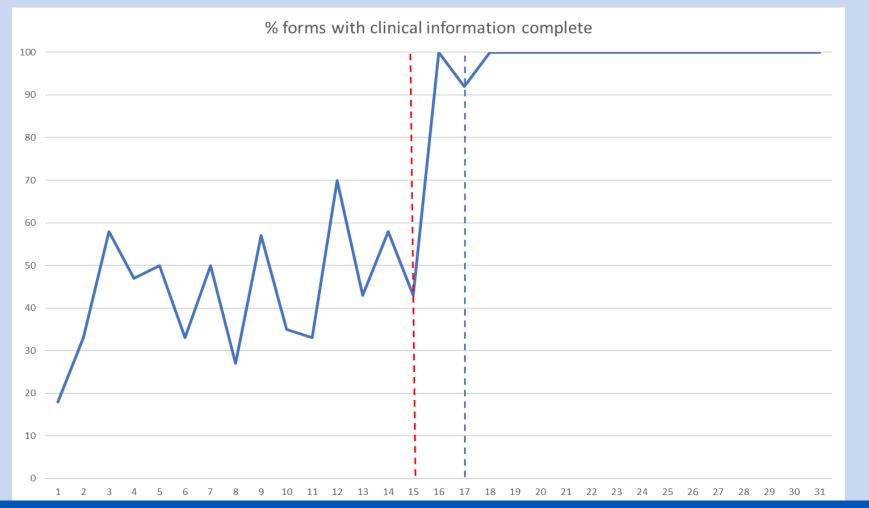
Suspend

| 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 % |





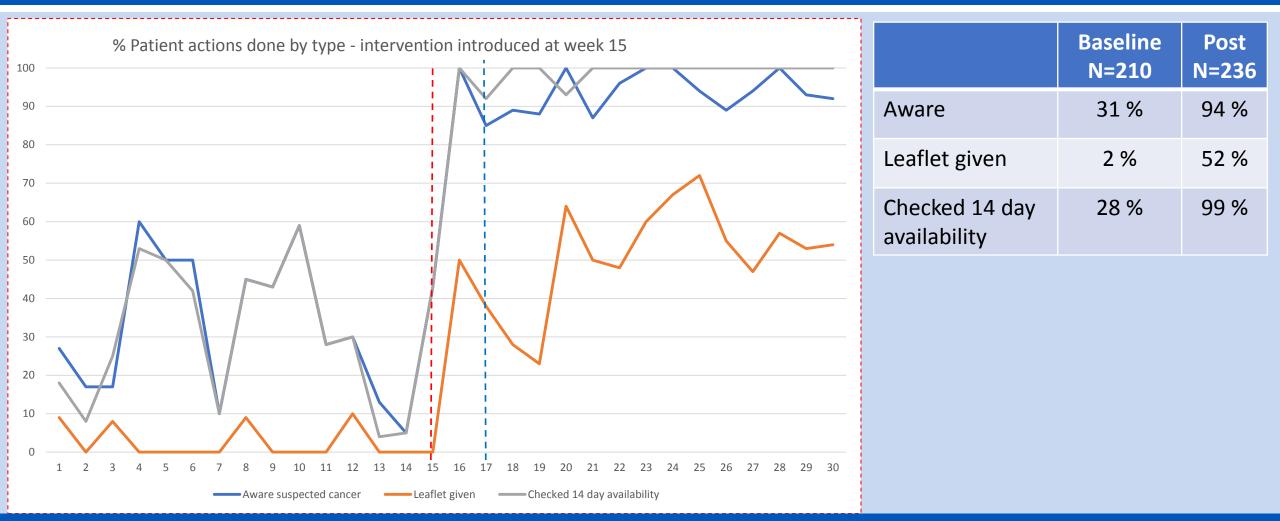
Study impact – 'blue box' actions

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







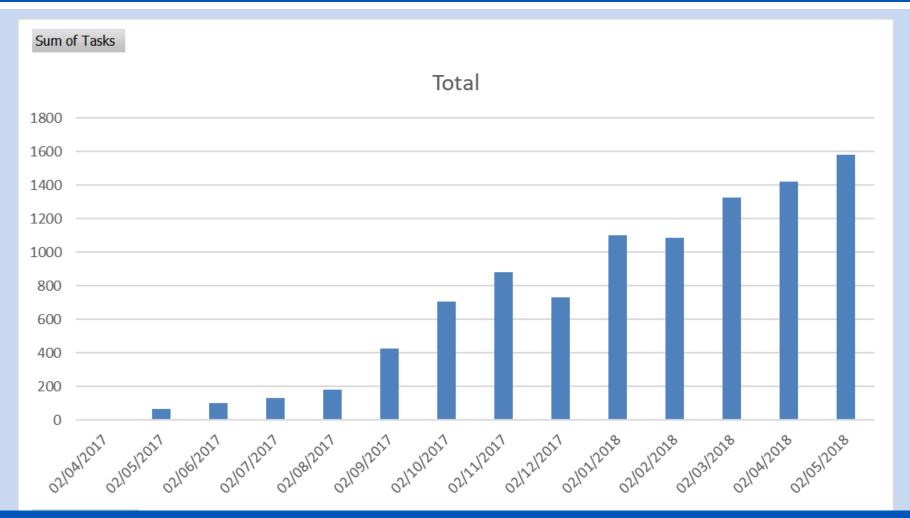
Study impact – time and cost savings

- 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





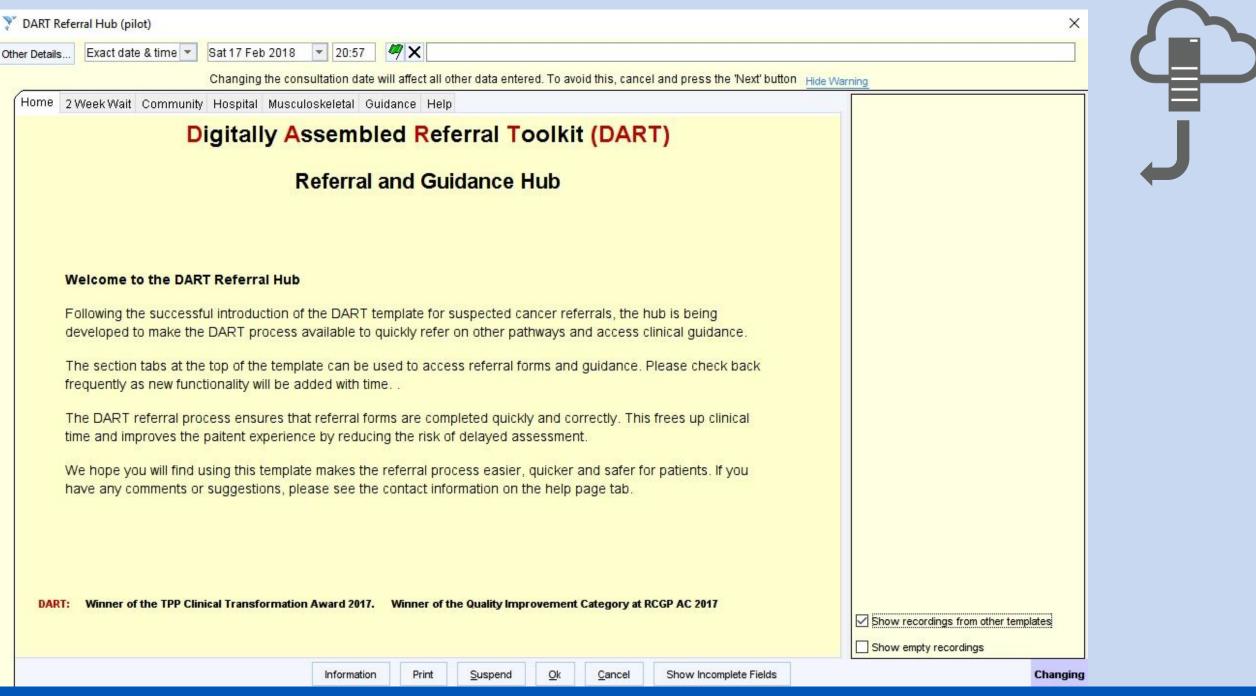


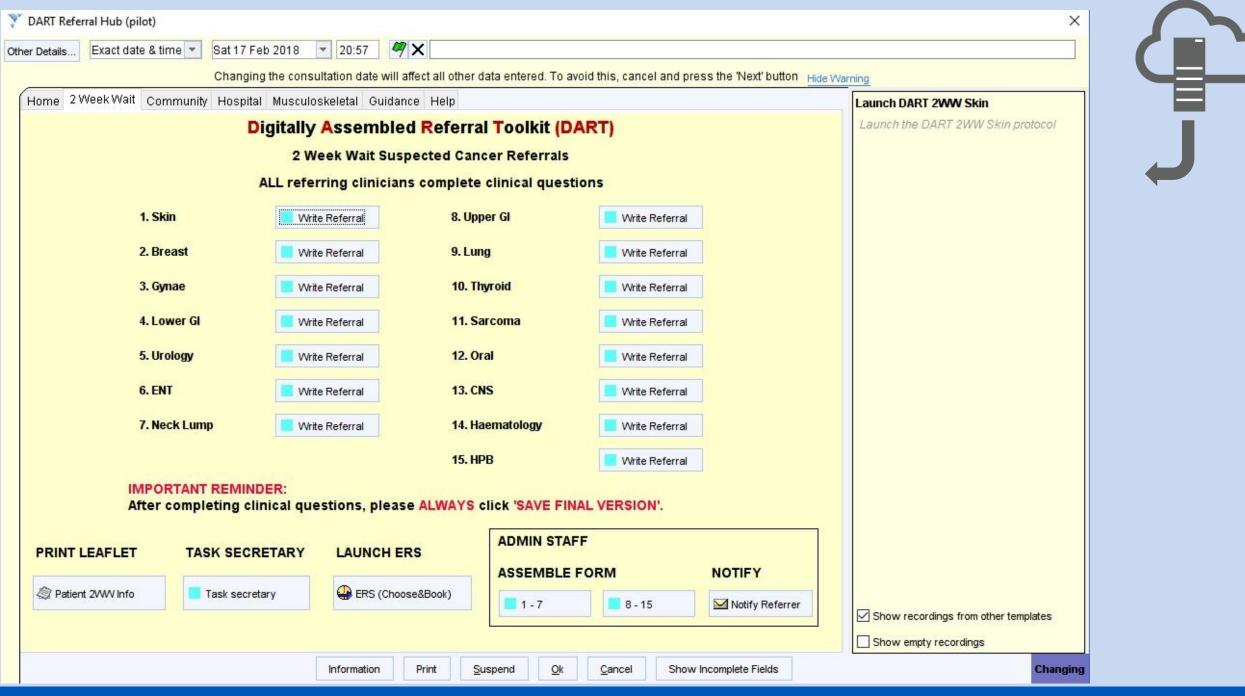
The future – DART Referral Hub

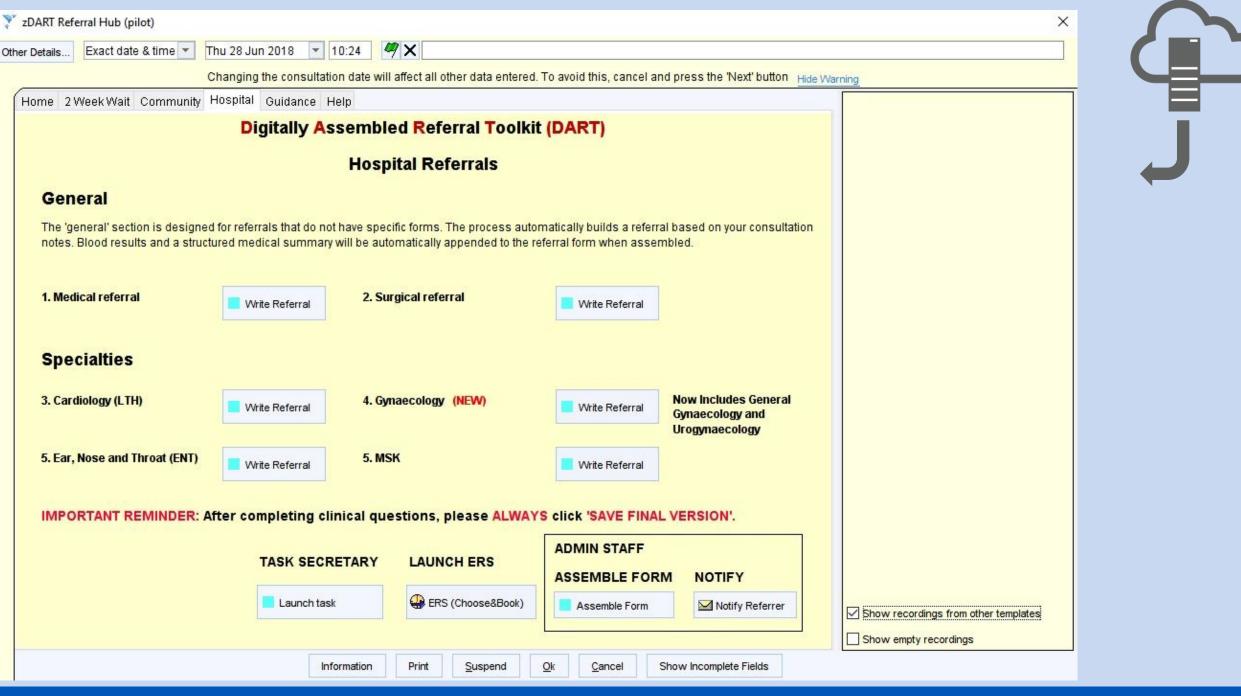
Sections for planned care pathways (hospital / community)

• 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