

Cardiac services
Making best use of the team

Jeremy Dwight 2009

Objectives

- Improving access to investigations
- Improving access to advice
- Ensuring continuity of care
- Accessing subspecialist services
- Reducing duplication
- Reducing unnecessary outpatient appointments

What do we provide?

New patient clinics

- General cardiology outpatients – all cardiology consultants
 - Specialist clinics
 - Arrhythmia
 - Heart failure
 - Marfans
 - Adult congenital heart disease
 - Hypertension
 - Rapid access chest pain clinic
- Clinicians
- Bashir, Betts, Rajappan,
Bhattacharya, Dwight
Forfar
Forfar, Ormerod
Cassedei
Dwight, Forfar, Ormerod,
Rajappan

Additional Follow up clinics

- Nurse led
 - Arrhythmia
 - Advanced heart failure
 - Post PCI (angioplasty)
 - AICD (defibrillator)
- Technician led
 - Pacing
 - ICD

Support services

- E mail advice line
- ECG (open access)
- Echocardiography
- Exercise testing
- Rhythm analysis
- MRI
- Nuclear cardiology
- 24 hour ambulatory BP monitoring

Choose and Book

- Generic referrals
 - First presentation
 - General cardiology
 - Valvular heart disease
 - Basic arrhythmias - atrialfibrillation, palpitations
 - Breathlessness ? Heart failure
 - Chest pain – not suitable for rapid access chest pain clinic
 - Pre operative assessment
- Referring to a given consultant (still possible via choose and book)
 - Previously known to the consultant
 - Area of expertise e.g. complex arrhythmias, advanced heart failure, adult congenital heart disease, hypertension

To enter the search for a named clinician click in the Named Clinician box.

The screenshot shows the NHS Choose and Book service search interface. The page title is "NHS Choose and Book - Microsoft Internet Explorer". The navigation bar includes "Help", "ALERTS 27/08/2009 16:29", "Referring Clinician", and "Log Out". The main header displays "choose and book" and fields for "Patient:", "Gender:", "Date of Birth:", "Age:", and "NHS:". The "Service Search Criteria" section is active, showing "Commissioning Organisation: OXFORDSHIRE PCT" and "Initial Referring Clinician/Organisation:". The "Request Type" is set to "Appointment" and "Priority" is "Routine". The "Due By Date" field is empty. The "Content Sensitive" checkbox is unchecked. The "Problem:" and "Requested Procedure:" fields are empty. The "Problem Status:" dropdown is set to "Problem Status:". The "Named Clinician:" field is highlighted with a blue arrow. The "Specialty:" dropdown is set to "Specialty:". The "Clinic Type:" dropdown is set to "-- Not available without specialty --". The "Organisation or Site Name:" field is empty. The "Additional Requirements" section is empty. The "Search for services with:" section includes "Indicative Wait Time Less Than" (empty) "Days", "Distances Within" (empty) "Miles of" "ox3" "9du" "Postcode", and a checked checkbox for "Age and Gender Appropriate Services Only". The bottom navigation bar includes "Cancel", "View/Modify Shortlist", "Search Primary Care", and "Search All". The footer indicates "This site is secured using 128-bit SSL encryption." and "Trusted sites".

Help | ALERTS 27/08/2009 16:29 | Referring Clinician | Log Out

choose and book Patient: Gender: Date of Birth: Age: NHS:

Service Search Criteria

Commissioning Organisation: OXFORDSHIRE PCT

Initial Referring Clinician/Organisation:

* Request Type: Appointment

* Priority: Routine Due By Date: / / Content Sensitive

Problem: Problem Status:

Requested Procedure:

* Enter one or more of the following fields

Clinical Term:

Specialty:

Clinic Type: -- Not available without specialty --

Named Clinician:

Organisation or Site Name: Additional Requirements

Search for services with:

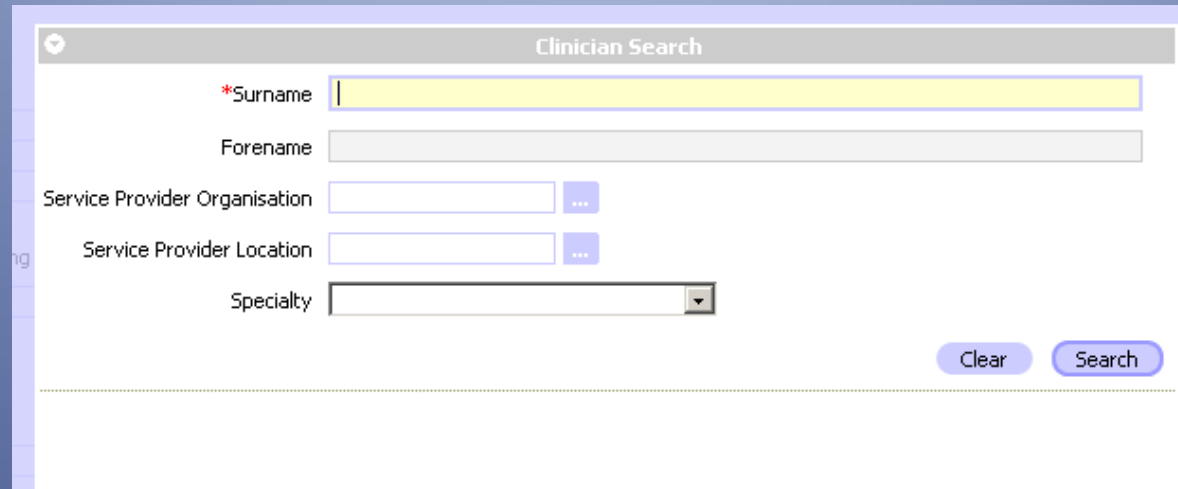
Indicative Wait Time Less Than Days Distances Within Miles of ox3 9du Postcode

Age and Gender Appropriate Services Only

Cancel View/Modify Shortlist Search Primary Care Search All

This site is secured using 128-bit SSL encryption. Trusted sites

The search screen will appear



The screenshot shows a web form titled "Clinician Search". It contains the following fields and controls:

- *Surname**: A text input field with a yellow highlight and a cursor.
- Forename**: A text input field.
- Service Provider Organisation**: A text input field with a blue "..." button to its right.
- Service Provider Location**: A text input field with a blue "..." button to its right.
- Specialty**: A dropdown menu.
- Clear**: A blue button.
- Search**: A blue button.

A horizontal dotted line is located below the "Clear" and "Search" buttons.

Enter the **Surname** of the desired Clinician you wish to find, then enter further details if you wish to limit the search findings (e.g. forename, organisation or location or specialty).

Click Search

Choose and Book now shows you all the Named Clinicians in the system that meet your search criteria.

The screenshot shows a web interface for searching clinicians. The form is titled "Clinician Search" and contains the following fields:

- *Surname: dwright
- Forename: (empty)
- Service Provider Organisation: (empty)
- Service Provider Location: (empty)
- Specialty: (empty)

Buttons for "Clear" and "Search" are located at the bottom right of the form.

Name	Job Role-Location
Dwright, Jeremy F St John	Consultant - OXFORD RADCLIFFE HOSPITALS NHS TRUST

To select one of the Clinicians, click on their row, not their name, to highlight them in orange.

Click Done

The screenshot shows a 'Clinician Search' dialog box with the following fields and controls:

- *Surname: dwight
- Forename: (empty)
- Service Provider Organisation: (empty) with a dropdown arrow
- Service Provider Location: (empty) with a dropdown arrow
- Specialty: (empty) with a dropdown arrow
- Buttons: Clear, Search

The search results are displayed in a table with the following columns and data:

Name	Job Role-Location
Dwight, Jeremy F St John	Consultant - OXFORD RADCLIFFE HOSPITALS NHS TRUST

Buttons: Cancel, Done

You will now see the name of the selected clinician in the **Named Clinician** field on the main screen.

NHS Choose and Book - Microsoft Internet Explorer

Help | ALERTS 27/08/2009 16:29 | Referring Clinician | Log Out

choose and book Patient: Gender: Date of Birth: Age: NHS:

Service Search Criteria

Commissioning Organisation: OXFORDSHIRE PCT

Initial Referring Clinician/Organisation:

* Request Type: Appointment

* Priority: Routine Due By Date: / / Content Sensitive

Problem: Problem Status:

Requested Procedure:

* Enter one or more of the following fields

Clinical Term:

Specialty:

Clinic Type: -- Not available without specialty --

Named Clinician: Dwight, Jeremy F St John

Organisation or Site Name: Additional Requirements

Search for services with:

Indicative Wait Time Less Than Days Distances Within Miles of ox3 9du Postcode

Age and Gender Appropriate Services Only

Cancel View/Modify Shortlist Search Primary Care Search All

This site is secured using 128-bit SSL encryption. Trusted sites

Only those services that the clinician is assigned to will be displayed.

The screenshot shows the NHS Choose and Book interface in a Microsoft Internet Explorer browser window. The page title is "NHS Choose and Book - Microsoft Internet Explorer". The navigation bar includes "Help", "ALERTS 27/08/2009 16:29", and "Log Out". The main header is "choose and book" with search filters for Patient, Gender, Date of Birth, Age, and NHS. The "Service Selection" section has a "Group By:" dropdown set to "None". Below this is a table of services with columns: Select, Miles, Service Name, Referrer Alert, Directly Bookable, Location, Patient Information, Appointment Type, Specialty, Indicative Wait Time, Organisation Type, and Menu. Two services are listed, both for "Advanced Heart Failure-Cardiology-Oxford Radcliffe-RTH" at "JOHN RADCLIFFE HOSPITAL". The first service has a 15-day wait time, and the second has a 38-day wait time. At the bottom, there are buttons for "Cancel", "Search Criteria", "Appointment Search", and "Request". A security notice at the bottom states "This site is secured using 128-bit SSL encryption." and "Trusted sites".

Select	Miles	Service Name	Referrer Alert	Directly Bookable	Location	Patient Information	Appointment Type	Specialty	Indicative Wait Time	Organisation Type	Menu
<input type="checkbox"/>	-	Advanced Heart Failure-Cardiology-Oxford Radcliffe-RTH		N	JOHN RADCLIFFE HOSPITAL	nhs.uk	First outpatient	Cardiology	15 Days	NHS Trust	Secondary Care
<input type="checkbox"/>	-	Cardiology-Oxford Radcliffe-RTH		N	JOHN RADCLIFFE HOSPITAL	nhs.uk	First outpatient	Cardiology	38 Days	NHS Trust	Secondary Care

Accessing subspecialties

- Separate listing on choose and book

* Enter one or more of the following fields

Clinical Term:

Specialty:

* Clinic Type:

Named Clinics

- Arrhythmia
- Cardiology Genetics
- Congenital Heart Disease
- Heart Failure
- Hypertension
- Ischaemic Heart Disease
- Lipid Management
- Not Otherwise Specified
- Rapid Access Chest Pain inc Exercise ECG
- Valve Disorders

Organisation or

Search for service

Indicative Wait

Accessing subspecialties

- Arrhythmias - Betts, Bashir, Rajappan
 - Wolff Parkinson White
 - FH of sudden death – screening for Brugada long QT etc
 - Recurrent symptomatic atrial fibrillation for consideration of ablation therapy
 - Recurrent symptomatic supraventricular tachycardias
 - History of ventricular tachycardias
 - Syncope felt to be arrhythmic in origin in patients with a history of ischaemic heart disease or

Accessing subspecialties

- Heart failure Bhattacharya, Dwight
 - Severe unstable heart failure e.g. recurrent admissions
 - Diastolic heart failure
 - Heart failure with multiple co morbidities e.g. advanced renal disease
 - Consideration for CRT or AICD
 - Associated pulmonary hypertension

Accessing subspecialties

- Adult congenital heart disease Forfar, Ormerod
 - Previous surgically corrected congenital heart disease.
 - Assessment of Atrial septal defect or PFO for closure

Accessing subspecialities

Hypertension

Prof B Cassedei

Common conditions seen by the Hypertension Service

- Refractory / difficult to treat hypertension
- Suspected secondary hypertension
- Suspected white coat hypertension (for ABPM only)
- Re-referral of patients known to the Hypertension Service
- NOT LVH on ECG ? For echo – use e mail advice line

Procedures/investigations etc. which may be arranged following referral to the Hypertension Service

- 24 hour ambulatory blood pressure monitor
- Screening for secondary causes of hypertension
- Advice on lifestyle and diet
- <http://orhtest.oxnet.nhs.uk/forclinicians/referrals/cardiac/hypertension/hypertension.aspx>

Accessing subspecialties

- Angioplasty
 - Refer to the original interventionalist if possible
- Valvular heart disease
 - For consideration of percutaneous valve replacement (TAVI)
Prendegast

- History of AICD, AF ablation

- Arrhythmia specialist nurses

Angela Griffiths

Email: angela.griffiths@orh.nhs.uk

Tara Meredith

Email: tara.meredith@orh.nhs.uk

AICD specialist nurse

Nicola Meldrum

E mail: nicola.meldrum@orh.nhs.uk

Pacemaker follow up

- Pacing clinic
 - Pacing checks
 - New referrals for devices implanted out of area
 - Post implantation assessment of wounds

Fax through request to Pacing for the attention of Jennifer Cole (cardiac technician) – 01865 220290

Open access investigations

- ECG
- Rhythm analysis (OP not required)
 - Referral letter to be addressed to Diane Johnson (Cardiac technician) containing the following information
 - Frequency of attacks
 - Duration
 - Symptoms during attack
 - Mental or physical disability

Telephone: 01865 220258

Fax: 01865 220259

Email: ECG.dept@orh.nhs.uk

Where choose and book does not work well

- Where all is required is advice
 - Use e mail advice for new patients
 - E mail or fax enquiry directly to consultant if under follow up by cardiologist or well known.
- Accessing investigations rather than an appointment
 - All get an appointment which subsequently has to be cancelled - not always successfully
 - Use e mail advice line

E mail advice line

- Access via
 - oxon.cardiologyadvice@nhs.net
- Consultant cardiologist advice
 - reply within 2 working days.
- Recommended usage
 - Advice where an outpatient appointment may not be necessary e.g.
 - Abnormal ECG in an asymptomatic patient
 - Incidental ECG findings during investigations
 - Voltage criteria for LVH
 - Q waves in patients without a history of ischaemic heart disease
 - Rate or rhythm control and anticoagulation in AF
 - Risk factor control
 - Drug interactions/alternatives
 - Deciding on the need for an outpatient appointment or investigation only e.g.
 - Murmurs in asymptomatic patients with a normal ECG
 - Requests for Rhythm analysis in patients with palpitations or syncope
 - Incidental finding of cardiomegaly on CXR
 - Requests from A+E for chest pain clinic or outpatient investigations or appointments which may not be justified
 - Requests from pre assessment clinics for cardiology review

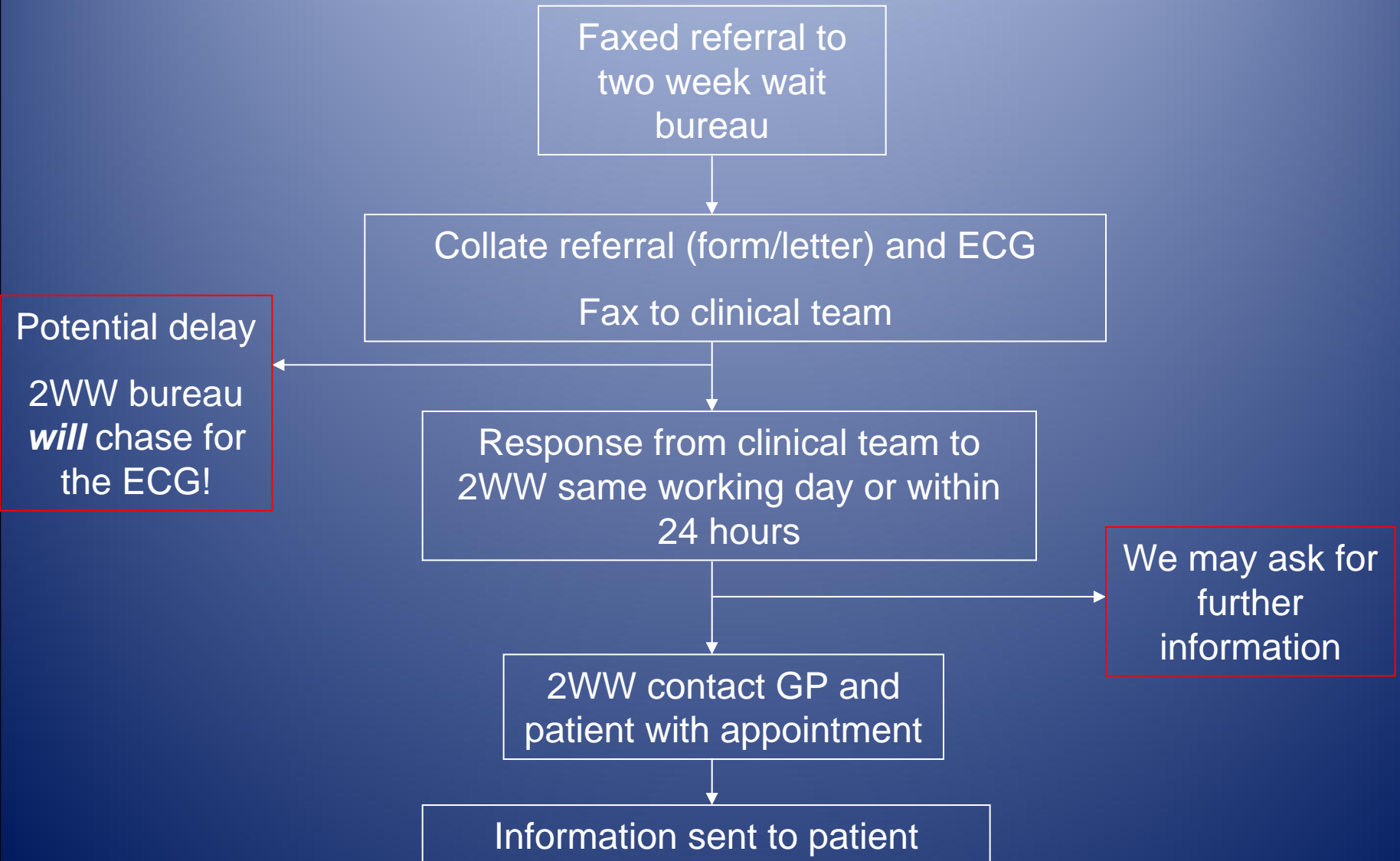
Fax /e email consultants secretary (not using choose and book)

- Review of 24 hour tape results
- Advice on a patient known well to a given consultant
- Assessment for non cardiac surgery in a patient known to a consultant (a further appointment may not be necessary)

Objectives of the Rapid Access Chest pain clinic

- An opportunity to
 - make an early diagnosis and prognostic assessment for people who present with symptoms suggestive of coronary disease
 - discuss the risk factor profile and discuss options for treatment with the patient
 - access further investigation that may be needed
 - access intervention that may be urgent

Rapid Access Chest Pain Clinic - referral process



The referral

- Components:
 - A current symptom history
 - Relevant previous medical history
 - A risk factor profile
 - Check lipid profile, BG and FBC
 - Recent ECG

Appropriate patient groups

- People who present with predictable, effort related symptoms

Or -

- People who are at significant risk who present with less typical symptoms

Refer to Cardiology

- People who have already been diagnosed with coronary disease
- People who have a murmur
- People who have a grossly abnormal ECG – LBBB, LVH with strain
- People who present with symptomatic palpitations
- People with uncontrolled high blood pressure
- People with uncontrolled arrhythmias, including atrial fibrillation
- The very obese (>120kg)

Contra-indications to exercise testing for RACPC

- Uncontrolled arrhythmia
- Uncontrolled hypertension
- Aortic stenosis
- Recent complicated MI
- Unstable angina
- Physical inability to undertake a stress test

The on call cardiology registrar

- Arranging urgent review or for urgent advice in patients already known to the service
- Deciding to admit as an emergency vs. early OP appointment.
- NOT routine advice on ECG's, anticoagulation, palpitations etc. Use e mail advice line