James Paget University Hospitals NHS Foundation Trust

Criteria for Primary Care Referrals to Radiology Trust Guideline

A Clinical Guideline recommended for use

In:	Radiology, Primary Care
By*:*	Radiologists, Radiographers, General Practitioners, Non-medical referrers
For:	All patients referred for diagnostic imaging
Key words:	Referrals, Diagnostic tests, CT, MRI, Ultrasound, X-ray
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Assessed and approved by the	Clinical Skills Group
Reported as approved to	
Document issued:	April 2022
To be reviewed before:	April 2025
To be reviewed by:	Penelope Moores, Ryan Smith
Document Reg. No:	

Version Information

Version No	Updated By	Updated On	Description of Changes
Version one	Penelope Moores		To originate document

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1. Objectives

To provide clear guidance for referrers when referring for diagnostic imaging.
To provide clear guidance for radiology staff when vetting requests for diagnostic imaging to enable the best management of the patient

2. Rationale

This document was written to assist primary care referrers in requesting the appropriate imaging modality to assist in patient management and diagnosis. The aim is to enable best practice and support radiology staff when accepting and vetting requests for diagnostic imaging.

3. Clinical audit standards

To ensure that this document is compliant with the above standards, the following monitoring processes will be undertaken:

Retrospective review of 5% of referrals from primary care to radiology, performed annually, to ensure vetting and appropriate imaging was performed.

The audit results will be sent to clinical skills who will ensure that these are discussed at relevant governance meetings to review the results and make recommendations for further action.

4. Summary of development and consultation process undertaken before registration and dissemination

The authors listed above drafted this document on behalf of the radiology department who has agreed the final content. During its development it has been circulated for comment to

Dr. V. Shenoy	Clinical Lead for Radiology
Ms. Rachel Hulse	Head of Ultrasound
Mrs. Anita Haylett	Head of CT/MRI
Ms. Jill Girling	Head of X-ray
Mrs. Dorothy Wheatman	Diagnostic Imaging Service Manager
Mrs. Sue Cleveland	Senior Sister, Radiology
Dr. David McConnell	Clinical Lead for CCG.

A few minor comments were returned following review by the interested parties and these recommended changes were added to the document.

This version has been endorsed by the named staff/ clinical committee and hospital.

5. Distribution list/ dissemination method

JPUH intranet

6. References

1. Royal College of Radiologists, iRefer guidelines
2. British Thyroid Association (2014) British Thyroid Association Guidelines for the Management of Thyroid Cancer. Clinical Endocrinology. 81(1), 1-122.
3. NICE guideline CG150, headaches in over 12s
4. NICE guideline NG12, suspected cancer: recognition and referral
5. NICE guideline CG54, urinary tract infection in children
6. NICE guideline NG156, abdominal aortic aneurysm: diagnosis and management

7. Associated Documents

Knowledge Anglia, NHS Share page accessed at: Knowledge Anglia

Details Section

If the required imaging is not covered by this guideline, or there is a specific enquiry related to diagnostic imaging, the Radiology secretaries can be contacted on 01493 452403 Monday to Friday between the hours of 8.30 to 17.00.

8. Considerations when referring:

- It is the responsibility of the referring physician to provide full and comprehensive clinical details and ensure that a similar examination has not been performed recently with the same clinical information before making the referral. Any referral without appropriate clinical history may be returned.

- The referrer should check the pregnancy status of the patient within child bearing age prior to requesting the examination, where appropriate.

- The referrer should include all information deemed relevant to the examination, for example; the mobility of the patient, any additional adjustments that may be required etc.

- The member of radiology staff vetting the referral will select the most appropriate imaging modality based on the clinical information provided. This may not necessarily be the examination originally requested.

- In the case of general X-ray, the radiographer will decide the correct projections based on the clinical information and mechanism of injury.

- If an imaging request is made based on the recommendation of a JPUH specialist, please include the name of the specialist on the referral in case of any imaging enquiries.

- If the referral is being made following imaging at a different institution, please include the details of when and where the previous imaging was performed so that the previous imaging can be imported prior to the examination taking place.

- All referrals for MRI must include the required safety information.
- Any referrals for CT that are likely to involve contrast administration must include an eGFR taken within the previous six months

9. Referral Guidance

9.1 Head and Neck

Do not refer people diagnosed with tension-type headache, migraine, cluster headache or medication overuse headache for neuroimaging solely for reassurance.

9.1.1 Ultrasound

Clinical indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Lymph nodes clinically suspicious for malignancy, including large size, rapid growth or a fixed mass	**X**		Consider 2WW referral to ENT
Small lymph nodes in the neck		**X**	Patients with clinically benign neck nodes do not benefit from ultrasound
Generalised neck swelling or neck pain		**X**	
Skin lesions		**X**	Refer to dermatology
Swelling related to the sternoclavicular joint		**X**	
Cervical mass, unsure of origin ie: is this thyroid?	**X**		
New or rapidly growing thyroid lump	**X**		Consider urgent referral to ENT
Follow up of established thyroid nodules		**X**	These referrals should be via ENT unless specifically requested by the Radiologist at the initial scan.
Thyrotoxicosis		**X**	Consider referral to Endocrinology

Suspected salivary gland mass or tumour	**X**		Consider urgent referral to ENT
History suggestive of sialadenitis (to exclude calculi)	**X**		
Soft tissue lump with classical signs of a benign lump ie. with corresponding clinical history of no recent increase in size or change in clinical features		**X**	
Temporal arteritis		**X**	Suggest same day referral to rheumatology

9.1.2 MRI or CT Neck

Clinical indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
MRI or CT Neck	**X**		Only indicated for direct G.P. referral if the study is recommended by a Radiologist

9.1.3 MRI or CT Brain

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Chronic headache with no focal neurology		**X**	
Chronic headache that has changed significantly (e.g. increased in frequency)	**X**		
Headache associated with vomiting and no focal neurological signs	**X**		
Headache with unexplained focal signs	**X**		
Headaches which wake the patient from their sleep	**X**		
Atypical headaches (not consistent with migraine or tension-type), unusual headache precipitants or unusual aura symptoms	**X**		

Headache with a history of cancer (especially breast and lung)	**X**		Consider urgent specialty referral
Seizures in a patient with a history of cancer	**X**		Consider urgent specialty referral
Rapidly progressive focal neurological deficit	**X**		Consider urgent specialty referral
Significant alteration in consciousness, memory, confusion or coordination	**X**		Consider urgent specialty referral
Thunderclap headache within the last two weeks		**X**	Consider emergency admission
Fever and meningism		**X**	Consider emergency admission
Acute glaucoma		**X**	Consider emergency admission
Headache and papilloedema		**X**	Consider emergency admission
Papilloedema with focal neurological signs or reduced level of consciousness		**X**	Consider emergency admission
MRA Brain/Circle of Willis		**X**	Specialist referral only
Suspected brain tumour		**X**	Consider urgent specialty referral (neurology)
Suspected stroke		**X**	Consider urgent specialty referral (stroke team)
Signs or symptoms suggestive of multiple sclerosis		**X**	Consider specialty referral (neurology)
Visual disturbances		**X**	Consider specialty referral (ophthalmology)
New onset seizures or suspected seizures		**X**	Consider specialty referral (first seizure clinic)
Pituitary symptoms		**X**	Consider specialty referral (endocrinology)
Papilloedema without focal signs or reduced level of consciousness		**X**	Consider specialty referral (ophthalmology)

Cognitive impairment/ dementia		**X**	Consider specialty referral (neurology/psychiatry/care of the elderly services)
Headache with relevant systemic illness		**X**	Please discuss with relevant clinical team
Headache aggravated by exertion or Valsalva-like maneuver		**X**	Please discuss with relevant clinical team
Elderly patient with a new headache and cognitive change		**X**	Please discuss with relevant clinical team

9.1.4 Extra-cranial Imaging

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Fractures of the temporal bones			
Evaluation of lesions of the orbit, larynx, pharynx, oral cavity and soft tissue spaces of the face.		**X**	Advise referral to ENT
Acute sinusitis with no complications		**X**	Treat clinically
Sinusitis with suspicion of malignancy / assessment for surgery / development of complications / failure of maximal medical treatment.		**X**	Advise urgent ENT referral

9.2 Chest

9.2.1 CT

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Lung nodule follow up	**X**		
If study is recommended by a Radiologist or chest physician	**X**		
CT Chest staging		**X**	Specialist referral only
CT Chest high resolution		**X**	Specialist referral only
CT Aorta		**X**	Specialist referral only
CT Pulmonary Angiogram		**X**	Specialist referral only
CT Coronary Angiogram (heart)		**X**	Specialist referral only

9.2.2 X-ray

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Cough – persistent for more than 3 weeks	**X**		Consider referral to chest physician
Breathing difficulty	**X**		
Chest Infection / pneumonia	**X**		
Spontaneous pneumothorax	**X**		
Suspected primary / secondary tumour	**X**		Consider referral to chest physician
COPD	**X**		Consider referral to chest physician

Haemoptysis	**X**		Consider referral to chest physician
Cardiomegaly / tachycardia / bradycardia	**X**		Consider referral to chest physician

9.3 Abdomen

9.3.1 Ultrasound Aorta

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
For diagnosis of abdominal aortic aneurysms in patients who do not meet the national screening criteria	**X**		
Screening for abdominal aortic aneurysms		**X**	
Known abdominal aortic aneurysm >3cm		**X**	Refer to vascular surgery

9.3.2 Ultrasound abdomen

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Altered LFTS		**X**	Single episode of mild to moderate enzyme elevation
Altered LFTS	**X**		Abnormal LFTs on two or more occasions in otherwise asymptomatic patients
New onset painless jaundice	**X**		Consider urgent specialty referral
New onset painful jaundice	**X**		Consider specialty referral

Abdominal pain suggestive of gallbladder pathology	**X**		
Gallbladder polyp follow-up		**X**	Consider referral to the upper G.I. team
Weight loss and chronic reflux	**X**		Consider OGD as well as ultrasound.
Persistent or frequent bloating occurring over 12 times in one month, with the addition of other symptoms, such as a palpable mass, increased abdominal girth or raised Ca 125	**X**		Request scan of abdomen and pelvis
Suspected pancreatic cancer		**X**	CT more appropriate Consider urgent speciality referral
Altered bowel habit/diverticular disease		**X**	Consider speciality referral
Constipation		**X**	
Weight loss and anaemia		**X**	Consider urgent speciality referral (lower G.I. team)
Weight Loss and persistent reflux		**X**	Consider urgent speciality referral (upper G.I. team)
Rectal bleeding and change of bowel habit		**X**	Refer to endoscopy
Abdominal pain excluding suspected gallstones or gallbladder disease		**X**	Consider CT
Upper abdominal mass -		**X**	Consider CT
Diabetes		**X**	
Difficulty swallowing or dyspepsia		**X**	Consider referral to endoscopy

9.3.3 CT Abdomen and Pelvis

Request with caution in patients under the age of 40, consider ultrasound abdomen in this age group (please see ultrasound abdomen section).

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Unexplained abdominal pain Please provide detailed clinical information along with any relevant test results	**X**		**Exclusions are:** **Abdominal pain suggestive of gallbladder pathology** – consider ultrasound **Abdominal pain typical for renal colic** - consider CT urinary tract **Persistent or frequent bloating occurring over 12 times in one month**, with the addition of other symptoms, such as a palpable mass, increased abdominal girth or raised Ca 125 – consider ultrasound abdomen +/- pelvis and specialist referral **Soft tissue lump** If there are concerning features (i.e. increase in size, pain, tethered to skin etc.) – consider ultrasound. If none of the above concerning features – ultrasound is not indicated **Suspected hernia** please refer to ultrasound hernia section **Unexplained nausea, vomiting and change in bowel habit** consider specialist referral **Pelvic pain** consider ultrasound pelvis **Pulsatile abdominal mass** consider ultrasound aorta

Palpable abdominal mass	**X**		If the patient has an abdominal mass, please consider urgent speciality referral alongside imaging request.
Elevated CA-125 with normal ultrasound pelvis	**X**		Refer to gynaecology also

9.3.4 CT Pancreas

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Aged 60 and over with weight loss and any of the following: diarrhoea, back pain, abdominal pain, nausea, vomiting, constipation, new-onset diabetes.	**X**		

9.3.5 CT Thorax, Abdomen and Pelvis with Contrast

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
CT Thorax, Abdomen and Pelvis with Contrast		**X**	

9.3.6 MRI Liver/Spleen with contrast

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
MRCP		**X**	

9.4 Genitourinary

9.4.1 Ultrasound Urinary Tract

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Recurrent urinary tract infections **ADULT**	**X**		(≥ 3 episodes in 12 months) with no underlying risk factors. If recurrent or persistent unexplained urinary tract infections in ≥60 years old, patients require non-urgent referral to urology.
Urinary tract infection not responding to antibiotics or history of stone or obstruction **ADULT**	**X**		
Renal calculi	**X**		
Pain with suspected renal tract origin	**X**		Consider ultrasound rather than CT KUB as the primary investigation in young female patients
Deteriorating renal function	**X**		
Advised by a hospital specialist **ADULT**	**X**		
PAEDIATRIC patients with clinically atypical/severe UTI	**X**		Consider paediatric referral alongside ultrasound of the urinary tract
Infants < six months old with first-time UTI that responds to treatment	**X**		Consider paediatric referral alongside ultrasound of the urinary tract
Children aged 6 months and above if they have recurrent infections or have an atypical organism	**X**		Consider paediatric referral alongside ultrasound of the urinary tract

Children aged six months and older with first time typical UTI that responds to treatment		**X**	
Unexplained visible haematuria without urinary tract infection if **≥45years old**		**X**	Consider urgent referral to urology
Visible haematuria persists or recurs after successful treatment of urinary tract infection if **≥45 years old**		**X**	Consider urgent referral to urology
Unexplained microscopic haematuria **aged ≥60 years** with either dysuria or raised WBC count		**X**	Consider urgent referral to urology
If it is the patient's first episode of UTI **ADULT**		**X**	
Pain not typically renal origin		**X**	Consider CT or clinical referral
Hypertension		**X**	

9.4.2 CT

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Renal colic If aged over 40	**X**		Please only refer if there is associated dipstick heamaturia

9.4.3 Ultrasound Female Pelvis

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
If study is recommended by a hospital specialist	**X**		

Suspected pelvic mass	**X**		
Raised CA-125 and non-specific abdominal/pelvic symptoms	**X**		
Pelvic pain including suspected pelvic inflammatory disease and endometriosis	**X**		
Lost IUCD	**X**		If IUD not seen the radiology department will perform an Abdominal Xray
Polycystic ovarian syndrome	**X**		Only if diagnosis not confirmed by clinical and biochemical criteria
Prolonged unexplained amenorrhoea (>3-6 months) with a negative HCG		**X**	Hormonal assessment required (HCG, TFTs, FSH / LH, prolactin, testosterone)
Abnormal vaginal bleeding/ intermenstrual bleeding/ menorrhagia leading to anaemia or suspicion of fibroids (**pre and peri-menopausal patients**)	**X**		Speculum and ultrasound examination in the first instance. If symptoms persists consider gynaecology referral
Ovarian cyst follow up **premenopausal**	**X**		Simple cyst measuring less than 5 cm – no follow up required. Simple cyst measuring 5-7cm, repeat ultrasound in 6 months + Ca125. If cyst has increased in size or changed complexity – refer to gynae. If unchanged – annual ultrasound or discharge. Cyst greater than 7cm – perform Ca125 and refer to gynae Complex cyst. Perform Ca125 and refer to gynae

Recurrent miscarriage (3 or more)	**X**		
Aged over 55 with unexplained symptoms of vaginal discharge		**X**	Consider urgent referral
Postmenopausal bleeding		**X**	Consider urgent referral
Ovarian cyst follow up **postmenopausal**		**X**	Consider urgent referral
Infertility		**X**	Consider specialist referral
Follow up for benign lesions eg: fibroids/dermoid cysts/ovarian cysts		**X**	Unless on the advice of secondary care

9.4.4 MRI Pelvis

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
MRI Pelvis (gynaecology/endometrium)		**X**	Only if the study is recommended by a hospital specialist

9.4.5 Ultrasound Testes

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Acute pain or suspected torsion		**X**	Consider URGENT Urology referral which should not be delayed by imaging.
Ongoing painful enlargement or change in shape or texture of the testis	**X**		Consider urgent referral to urology

Acute pain in the absence of suspected torsion.	**X**		
Chronic (>3months) in the absence of a palpable mass		**X**	Unlikely to demonstrate a cause
Peri-testicular masses	**X**		Only require imaging if there are clinically concerning features present, such as rapid growth, or where non-urgent referral to urology is envisaged for treatment.

9.5 Groin/hernia

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Characteristic history and exam findings of a hernia including reducible palpable lump or cough impulse		**X**	Consider surgical referral. Irreducible and/or tender lumps suggest an incarcerated hernia and require URGENT surgical referral.
If unsure clinically whether there is a hernia or not		**X**	Consider surgical referral.
Groin pain and no palpable abnormality in young patients		**X**	Consider physiotherapy or watch and wait
Groin pain and no palpable abnormality in older patients		**X**	Look for alternative cause e.g. hip osteoarthritis

9.6 Small Bowel

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Small bowel ultrasound for inflammatory bowel disease		**X**	

9.7 Lymphadenopathy

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Patients with clinically benign groin, axillary or neck lymphadenopathy		**X**	Small nodes are commonly palpable in the groin, neck and axilla. If new and source of sepsis is evident, ultrasound is not required
Persistent lymph nodes with signs of malignancy including increasing size or fixed		**X**	Consider urgent speciality referral

9.8 Deep Vein Thrombosis

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Suspected DVT Upper or lower limb		**X**	Refer to Ambulatory, or ED out of hours.

9.9 Paediatric hips for suspected DDH

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Clinical abdominal examination OR breech presentation OR Immediate family history of DDH (if not already requested/performed during the post-natal period)	**X**		Only if child under 6 months of age. Over 6 months of age – consider referral to the orthopaedic paediatric clinic

9.10 Musculo-skeletal

9.10.1 Ultrasound

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Soft tissue mass with concerning features such as increase in size, pain, tethered to skin etc.	**X**		Include concerning features in the clinical history
Soft tissue mass with no concerning features		**X**	
Shoulder injection	**X**		Only indicated if patient has had a plain radiograph within the last 12 months, has completed a course of physio and has had a clinically guided injection in the community in the last 3 months with no benefit on follow up clinical review. Please confirm the above has been completed in the clinical history
Shoulder Diagnostic For assessment of rotator cuff tendons	**X**		Patient must have had a plain radiograph within the last 12 months
Hip (injection) Indicated for trochanteric bursal injection Not indicated for any other reason (specialist referral only)	**X**		Patient must have had a clinically guided injection in the community/primary care, in the last 3 months with no benefit on follow-up clinical review. Please confirm this has been completed in the clinical history
Foot and ankle		**X**	Specialist referral only
Elbow (diagnostic)		**X**	Specialist referral only

Elbow (injection)		**X**	Specialist referral only
Hip (diagnostic)		**X**	Specialist referral only
Knee (diagnostic and injection)		**X**	Specialist referral only
Wrist / Ankles (diagnostic)		**X**	Specialist referral only

9.10.2 MRI

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Spine. In the absence of neurological signs/red flags/adverse features.		**X**	
Cervical Spine Patients with neurology or adverse features	**X**		If there is dermatomal pain state which dermatome Loss of power or features of a myelopathy Consider patient referral to the orthopaedic spine team Adverse features including: • Focal neurology • Focal refractory back pain - concern for osteoporotic fracture • Trauma • Malignancy • Infection • Inflammation and myelopathy
Acute/chronic neck pain without neurology or adverse features		**X**	Please note generalised arm pain is not an indication.

Thoracic Spine Patients with neurology or adverse features:	**X**		Confirm patient has neurological signs/red flag features
Acute/chronic back pain without adverse features.		**X**	
Inflammatory Spine (Thoracic Spine and Sacroiliac Joints)	**X**		NICE guidance: Young people and adults with low back pain with or without sciatica do not have imaging requested by a non-specialist service (such as a GP practice) unless serious underlying disease is suspected. Specialist referral only.
Lumbar Spine Patients with acute back pain (≤6 weeks) with potentially serious features		**X**	Consider urgent specialist referral
Patients with back pain over 6 weeks with neurology	**X**		Confirm patient has neurological signs Consider patient referral to the orthopaedic spine team
Acute cauda equina		**X**	Consider referral to orthopaedics as this is a surgical emergency.
• Neurological (cauda equina syndrome/suspected spinal cord neurology) • Sphincter and gait disturbance • Saddle anaesthesia • Severe or progressive motor loss • Widespread neurological deficit		**X**	Consider specialist referral
Acute or chronic back pain with no radicular symptoms, no red flag/ adverse features, sciatica for less than 6 weeks or chronic back pain for over 6 weeks.		**X**	

Acute back pain (≤6 weeks) with: • focal refractory back pain – concern for osteoporotic fracture • Previous malignancy • Immunosuppression • Steroid use • Clinical suspicion of discitis	**X**		Urgent referral for MRI
Soft Tissue Mass		**X**	Confirm patient has had ultrasound and specialist referral
Suspected Osteomyelitis		**X**	Specialist referral
Suspected Bone Tumour		**X**	Radiograph should be performed first. If radiographic appearances are suggestive of primary bone tumour, referral to a specialist centre should not be delayed.
Shoulder		**X**	Features of shoulder instability or pre-op planning MRI should be by specialist referral only. Ultrasound is the investigation of choice in the assessment of rotator cuff and surrounding soft tissues
Brachial Plexus		**X**	Specialist referral only
Elbow		**X**	Specialist referral only
Wrist		**X**	Specialist referral only.
Hip	**X**		Confirm patient has: Plain radiograph within last 3 months. If plain radiograph findings do not correlate with the patient's clinical findings i.e. plain radiograph is normal, MRI is indicated.

Hip Suspected avascular necrosis or insufficiency fracture.	**X**		
Knee Acute knee pain following significant trauma such as sporting injury, fall or road traffic accident.	**X**		Plain radiograph first Consider simultaneous specialist referral
Knee Non-traumatic knee pain under 50 years	**X**		
Knee Chronic knee pain in patients aged 50 years or above i.e. over 4 weeks		**X**	
Knee In patients over 50 years unless suspected insufficiency fracture, a locked knee or suspected avascular necrosis		**X**	Specialist referral is recommended alongside the MRI request.
Ankle and Foot Patients with a history of trauma (i.e. inversion injury)	**X**		Indicted only if the patient has had a normal plain radiograph first and if clinical symptoms persist at 6 months after the injury.
Ankle and Foot Clinical suspicion of an insufficiency fracture	**X**		If patient has had a plain radiograph within last 3 months and findings do not correlate with the patient's clinical findings only
Ankle and Foot Atraumatic ankle pain with a normal radiograph, to assess for a radiographically occult/insufficiency fracture,	**X**		

or if the patient has features of tibialis posterior dysfunction (e.g. pain and swelling behind or below the medial malleolus) only.			
Paediatric Spine **0-12 years** with focal or persistent neck/back pain	**X**		Consider concurrent referral to the paediatric orthopaedics
Paediatric Spine **Above 12 years** with focal or persistent pain	**X**		Consider concurrent referral to the paediatric orthopaedics
Paediatric Knee Knee pain		**X**	Examine the hip – if there are any hip symptoms, radiographs of the hip and knee are recommended.
Paediatric Knee History of trauma	**X**		Consider referral if appropriate

9.10.3 X-ray

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Inflammatory poly-arthritis lasting longer than 2 weeks	**X**		X-ray of hands, feet, and chest
Persistent single joint symptoms	**X**		X-ray of relevant joint
Knee pain (>50 years)	**X**		Knee MRIs are of limited value for patients over 50 years of age. After clinical assessment, the over 5Os should have an X-ray as a first investigation
Knee Enlarging mass		**X**	Consider urgent referral

A “locked” knee in the under 50s (loss of extension but normal flexion)		**X**	Consider urgent referral
Knee night pain		**X**	Consider urgent referral
Knee a persistently warm, swollen knee on examination in a patient < 50		**X**	Consider urgent referral
Knee sudden onset non-traumatic severe pain		**X**	Consider urgent referral
Knee Septic arthritis		**X**	Consider urgent referral
Wrist / hand / radius and ulna/ elbow • Inflammatory arthritis • Osteoarthritis • Foreign body • Trauma • Infection • Acute pain • Suspected tumour • Assessment of alignment and healing	**X**		

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Hip • Trauma - suspected fracture and non-weight bearing • Infection • Acute pain • Suspected tumour • Alignment and healing	**X**		

• Painful prosthesis			
Hip Osteoarthritis	**X**		
Ankle/Foot • Trauma with definite bony tenderness • Infection • Foreign body	**X**		
Ankle/Foot Ligamentous injury		**X**	
Hallux valgus - if surgical intervention is planned	**X**		
Plantar fasciitis		**X**	
Severs Disease – heel pain with no trauma		**X**	
2nd – 5th toe undisplaced fracture		**X**	
Osteoarthritis	**X**		
Calcaneal Spur		**X**	

9.11 Breast

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Suspected breast abscess		**X**	Consider referral to the breast team
New onset persistent breast lump		**X**	Consider urgent referral to the breast team

9.12 Axilla

9.12.1 Ultrasound

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Patients presenting with a lump in the axilla alone with no known clinical abnormality of the breast	**X**		Mandatory required clinical information: Duration of symptoms Does the patient have localised tenderness or other current illness or condition associated with more generalised lymphadenopathy Clinical examination should determine whether the lump is likely to be related to ectopic breast tissue, enlarged axillary nodes or skin related. A general physical examination should be performed if a systemic cause is suspected.
Unexplained, clinically suspicious lump that is not skin related.	**X**		
Skin related lumps		**X**	
Pain only, in the absence of a lump		**X**	
Poorly defined increasing tissue in the axilla during pregnancy with no concerning clinical features		**X**	

9.13 Soft Tissues

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Soft tissue masses	**X**		Please request according to anatomical site (e.g. US upper arm) rather than US soft tissue

9.14 Obstetrics

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Bleeding in early pregnancy – refer EPAU		**X**	Refer to EPAU
Pregnancy related symptoms		**X**	Refer to the Obstetric team

9.15 Bone Mineral Density Scan (DXA)

Clinical Indication	Indicated for direct G.P. referral	Not indicated for direct G.P. referral	Additional comments
Men and women aged over 50 with a fracture at any site (not attributable to RTA or fall from above head height).	**X**		
Vertebral fracture	**X**		
Aged 60 + with height loss/kyphosis	**X**		
Aged 60 + with parental hip fracture	**X**		
Aged 60 + with family history of first degree relative with low trauma fracture	**X**		
Aged 60 + with first degree relative with kyphosis	**X**		

Aged 60 + with surgical/ premature menopause	**X**		
Radiological evidence of severe generalised osteopenia	**X**		
DepoProvera for more than 5 years (if result will influence use of drug)	**X**		
Hyperthyroidism / Hyperparathyroidism	**X**		
Malabsorption disorders (Coeliac disease)	**X**		
Long term oral steroid use (more than three months)	**X**		
Chronic respiratory disease	**X**		
Chronic inflammatory conditions (RA/ankylosing spondylitis/UC/Crohn's	**X**		
Androgen deprivation therapy for Ca prostate	**X**		
Hypogonadism	**X**		
Low BMI/Anorexia Nervosa	**X**		
Aromatase inhibitor for Ca Breast	**X**		
Post transplantation	**X**		
Post-menopausal women on Thiazolidinedione's	**X**		
Antiretroviral therapy	**X**		
Immobility / paraplegia (MS/stroke/other)	**X**		
Chronic liver or kidney disease / PBC / alcoholism	**X**		

10.0 TECHNICAL & CONTINGENCY CONSIDERATIONS

As defined below.

10.1 Roles

Within ICE there will be three distinct roles which may be designated for primary care/community staff:

GP: All registered GPs will be allocated to this role which will have full access to a range of agreed studies for referral as stipulated within this document.

Non-Medical Referrer: All nurse practitioners, physios or podiatrists with agreed and documented referral protocols will be allocated this role. This role allows access to limited referral tests as agreed as part of their protocol.

General User: Any users of ICE who need to access for lookup or administrative reasons will be allocated a general user role which does not have any permissions for requesting.

10.2 Business Continuity Plans

Please see below for guidance in the event of referral system issues:

1. When the CRIS (recipient) or ICE (referral) systems are declared as offline no referrals will interface between the two systems.

2. If CRIS is unavailable in isolation: You may be unaware of the outage impacting internal JPUH systems only, and therefore may continue to place referrals in ICE. Please note the imaging department may be unaware of the referral until the system is fully functional and backlogs of messages have been processed.

3. If ICE is unavailable: Wherever possible, please place the referral once the system is fully functional. Should the system be unavailable for a prolonged period please use the word template accessible via the Knowledge Anglia website (Knowledge Anglia), complete these fully and submit to the relevant Imaging Department via the contact details as per section 4.4.

Please be aware that any recent request made through ICE will be temporarily unavailable in most instances to the imaging department and may be delayed in processing. Should any urgent escalations be required, please complete a duplicate request using the word template and mark clearly as “Duplicate”, submitting as per section 4.4.

10.3 Scope for Electronic Referral

Electronic referral is available to all Great Yarmouth and Waveney GP Surgeries that have access to, and have been configured for, the JPUH ICE instance in terms of referral and resulting. Where any primary care / community site without access needs to refer Radiology tests (including those out of the immediate area), all referrals should be made using the relevant word template accessible via the Knowledge Anglia website (Knowledge Anglia), and emailed to the relevant

department as per section 4.4 below. Referrals direct to the JPUH Imaging Department should not be submitted via the Electronic Referral System (ERS), which will not be monitored routinely.

10.4 Contact Information

Troubleshooting Radiologist	01493 453920
X-Ray, Ultrasound and Fluoroscopy	RadiologyGeneralAppo@jpaget.nhs.uk
CT & MRI Examinations	CTMRAdmin@jpaget.nhs.uk

11. Monitoring Compliance / Effectiveness Table — Appendix 1

Document Name: Criteria for Primary Care Referrals to Radiology. Trust guideline.
Document Owner: Clinical Skills

Element to be monitored	***Lead Responsible for monitoring***	***Monitoring Tool / Method of monitoring***	***Frequency of monitoring***	***Lead Responsible for developing action plan and acting on recommendations***	***Reporting arrangements***	***Sharing and disseminating lessons learned & recommended changes in practice as a result of monitoring compliance with this document***
That referrals made to radiology from primary care are made using the guidance included in this document	Penelope Moores, Consultant Sonographer James Paget University Foundation NHS Trust	Retrospective review of 5% of referrals	Annual	Ryan Smith	Clinical skills	The Lead responsible for developing the action plans will disseminate lessons learned via the most appropriate committee e.g. Executive Board, Executive Sub-Board, Clinical Governance, Patient Safety and which hospital.