Imaging Criteria Guidance for GP and community requestors only

Document Control:

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Version	Date	Author	Reason/Change
V1.0	08/2020	Consultant Radiologist	To originate document
V2.0	01/2023	Consultant Radiologist	
V3.0	11/2023	Consultant Radiologist	Revised in line with new procedural template

Previous Titles for this Document:

Previous Title/Amalgamated Titles	Date Revised
None	Not applicable

Distribution Control

Printed copies of this document should be considered out of date. The most up to date version is available from the Trust Intranet.

Consultation

The following were consulted during the development of this document:

All Consultant Radiologists
Imaging Service Manager
Imaging Matron
Consultant Gynaecological Oncologist
Consultant Physician, Respiratory Medicine

Monitoring and Review of Procedural Document

The document owner is responsible for monitoring and reviewing the effectiveness of this Procedural Document. This review is continuous however as a minimum will be achieved at the point this procedural document requires a review e.g. changes in legislation, findings from incidents or document expiry.

Relationship of this document to other procedural documents

This document is a clinical guideline applicable to the Norfolk and Norwich University Hospital.

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Quick reference

If the advice given in this document does not help you with your query, please e-mail Radiology for advice at nnu-tr.radreferrals@nhs.net. A radiologist will aim to reply to your query with 48-72 hours.

For urgent enquiries please ring the Duty Radiologist on 01603 286286.

Please note that the vetting Radiologist will choose the most appropriate imaging modality and protocol appropriate to the clinical question and the clinical information provided. This may not necessarily be the examination you have originally requested.

If imaging request is made on the recommendation of an NNUH specialist then please state the name of the clinician so that any imaging enquiries can be directed to them. We would advise specialist doctors to request imaging themselves to avoid delay in future patient treatment.

If the recommendation is from a clinician from an outside institution, it is imperative to state where and when the studies were performed so that these are imported onto NNUH PACS for comparison purposes.

If a patient has been seen in the private sector and the clinician requires imaging or the patient needs to transfer to the NHS, the process is as follows:

1. Consultant writes to GP to say patient wants to transfer to NHS.
2. GP re-refers to Consultant in NHS
3. Consultant has NHS appointment with patient – this can be via telephone.
4. Consultant requests scan.

This document, when suggesting a 2-week-wait (2WW) referral, refers to clinical 2WW pathways rather than an imaging pathway.

NB. These are guideline for imaging indications only and are certainly not complete.

1. Introduction

1.1. Rationale

This guidance is written to aid community and primary care radiology referrals, specifically ensure the correct investigation is requested to aid and not unduly delay a patient's pathway. This guidance is supported by NICE, RCR and further endorsed by specialist physicians.

1.2. Objective

To ensure the correct investigation is requested to aid and not unduly delay a patient's pathway.

1.3. Scope

This document is for primary care and community referrals from GP, and community requestors only.
This document does not pertain to referrals from secondary care.

1.4. Glossary

The following terms and abbreviations have been used within this document:

Term	Definition
GP	General Practitioner
MRI	Magnetic Resonance Imaging
MRCP	Magnetic resonance Cholangiopancreatography
CT	Computed Tomography
2WW	2-week-wait
US	Ultrasound

2. Responsibilities

Radiology Consultants in collating evidence and clinical opinion when writing this guidance.

3. Imaging Criteria

3.1. Head and Neck Imaging

3.1.1. Ultrasound Neck

Indicated for direct GP referral:

- **Lymph nodes clinically suspicious for malignancy**, including large size, rapid growth or a fixed mass

Not indicated for direct GP referral:

- Small nodes in the neck are commonly palpable. Patients with clinically benign neck nodes do NOT benefit from ultrasound
- Generalised neck swelling or neck pain
- Skin lesions
- Swelling related to the sternoclavicular joint

3.1.2. Ultrasound Thyroid

Indicated for direct GP referral:

- Ultrasound may be required where there is doubt as to the origin of a **cervical mass**, i.e. is it thyroid in origin
- **New or rapidly growing thyroid lump** – suggest speciality 2WW referral for unexplained thyroid lump

Not indicated for direct GP referral:

- Routine imaging/follow-up of established thyroid nodules/goitre
- Thyrotoxicosis

3.1.3. Ultrasound Salivary glands

Indicated for direct GP referral:

- **Suspected salivary mass/tumour**
- History suggestive of **sialadenitis** (to exclude calculi)

3.1.4. MRI or CT Neck

Indicated for direct GP referral only if the study is recommended by a radiologist.

3.2. Neuroimaging

3.2.1. MRI or CT Brain

Consider emergency admission for the following:

- **Thunderclap onset headache within the last two weeks**
- **Fever and meningism**
- **Acute glaucoma**
- **Headache and papilloedema**
- **Papilloedema with focal neurological signs or reduced level of consciousness**

Indicated for direct GP referral alongside a speciality 2WW referral:

- **Rapidly progressive focal neurological deficit**
- **Significant alteration in consciousness, memory, confusion, or coordination**
- **Headache with history of cancer (especially breast and lung)**
- **Seizures in a patient with history of cancer**

Indicated for direct GP referral:

- **Headaches**
  - with unexplained focal signs

- atypical headaches (not consistent with migraine or tension-type), unusual headache precipitants or unusual aura symptoms
- where a diagnostic pattern has not emerged after 8 weeks from presentation
- associated with vomiting and no focal neurological signs
- chronic headaches which have changed significantly (e.g. increase in frequency)
- which wake the patient from sleep

Do not refer people diagnosed with tension- type headache, migraine, cluster

headache or medication overuse headache for neuroimaging solely for reassurance.

The following indications are for specialist referral (and not direct GP referral):

- Suspected brain tumour – suggest referral to fast track speciality 2ww neurology
- Suspected stroke – suggest referral to the stroke team
- Signs or symptoms suggestive of multiple sclerosis – suggest referral to neurology
- Visual disturbance – suggest referral to ophthalmology
- New onset seizures or suspected seizures – suggest urgent referral to first seizure clinic
- Pituitary symptoms – suggest referral to endocrinology
- Cognitive impairment/ dementia – suggest referral to neurology/psychiatry/care of the elderly services.
- Temporal arteritis – suggest same day referral to rheumatology
- Papilloedema without focal signs or reduced level of consciousness – suggest referral to ophthalmology
- Headache with relevant systemic illness - please discuss with relevant clinical team
- Elderly patient with a new headache and cognitive change - please discuss with relevant clinical team
- Headache aggravated by exertion or Valsalva-like manoeuvre - please discuss with relevant clinical team

3.2.2. MRA Brain/ Circle of Willis

Specialist referral only

3.3. Chest Imaging

3.3.1. CT Chest

Indicated for direct GP referral:

- If the study is recommended by a radiologist or chest physician
- Lung nodule follow up

Otherwise, please consider referral to a chest physician for further assessment.

3.3.2. CT Chest staging

Not indicated for direct GP referral. Specialist referral only.

3.3.3. CT Chest high resolution

Not indicated for direct GP referral. Specialist referral only.

3.3.4. CT Aorta

Not indicated for direct GP referral. Specialist referral only.

3.3.5. CT Pulmonary Angiogram

Not indicated for direct GP referral. Specialist referral only.

3.3.6. CT Coronary Angiogram (heart)

Not indicated for direct GP referral. Specialist referral only.

3.3.7. Ultrasound Axilla

Indicated for direct GP referral:

- Patients presenting with a **lump in the axilla alone with no known clinical abnormality of the breast**:
    - 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**.

Not indicated for direct GP referral:

- Skin related lumps
- Pain only in the absence of a lump
- Please note: Poorly defined increasing tissue in the axilla during pregnancy is usually due to ectopic breast gland and *does not require* an ultrasound unless there are concerning clinical features.

3.4. Abdominal Imaging

3.4.1. Ultrasound Aorta

Indicated for direct GP referral:

- **For diagnosis of abdominal aortic aneurysms** – in patients who do not meet the National screening criteria
  [Patients with known abdominal aortic aneurysm >3cm should be referred to vascular surgery]

Not indicated for direct GP referral:

- Screening for abdominal aortic aneurysms

3.4.2. Ultrasound Abdomen

Indicated for direct GP referral:

- **Altered LFTs - please include whether the patient is symptomatic (jaundice, pain etc)**
- **New onset painful/painless jaundice** requires an urgent ultrasound and speciality 2WW referral
- **Abdominal pain suggestive of gallbladder pathology**
- **Gallbladder polyp follow-up**
  - follow up is not indicated for polyps <5mm in size.
  - polyps >10mm, suggest referral to GI surgeon.
  - polyps of any size with symptoms, suggest referral to GI surgeon.
- **Weight loss and chronic reflux -** consider OGD as well as ultrasound.
- **Consider ultrasound abdomen and pelvis:**
  - **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

Not indicated for direct GP referral:

- Suspected pancreatic cancer - CT more appropriate and consider speciality 2WW referral
- Altered bowel habit/diverticular disease – consider speciality 2WW referral
- Weight loss and anaemia - consider speciality 2WW referral
- Abdominal pain excluding suspected gallstones or gallbladder disease – CT more appropriate
- Upper abdominal mass - CT more appropriate
- Diabetes

3.4.3. Ultrasound Pelvis

Antenatal imaging is not covered by this guidance.

Indicated for direct GP referral:

- **If study is recommended by a hospital specialist**
- **Suspected pelvic mass**
- **Raised CA-125 and non-specific abdominal/pelvic symptoms**

- **Pelvic pain** - including suspected pelvic inflammatory disease and endometriosis
- **Lost IUD** – if IUD is not seen at ultrasound, abdomen x-ray should be performed
- **Polycystic ovarian syndrome** – only if diagnosis not confirmed by clinical and biochemical criteria
- **Abnormal vaginal bleeding premenopausal** – speculum and ultrasound examination in the first instance; if persists, for gynaecology referral
- **Ovarian cyst follow up *premenopausal*** – as per NNUH policy (see appendix 1)
- **Recurrent miscarriage (3 or more)**
- **Aged over 55 with unexplained symptoms of vaginal discharge** – plus either thrombocytosis, haematuria or first presentation of symptoms.

Not indicated for direct GP referral:

- **Postmenopausal bleeding** – refer direct to 'PMB clinic'
- **Ovarian cyst follow up *postmenopausal*** – refer directly to gynaecology
- **Infertility** – refer directly to specialist clinic

3.4.4. Premenopausal Ovarian cysts

3.4.5. Ultrasound Testes

Acute pain or suspected torsion – suggest URGENT Urology referral which should not be delayed by imaging.

Indicated for direct GP referral:

- **Non-painful enlargement or change in shape or texture of the testis –** *also requires speciality 2WW referral to urology*

- ***Peritesticular masses are most commonly benign and can be managed in primary care at first. They only require imaging assessment if there are clinically concerning features present such as rapid growth (this also requires 2WW referral to urology), or where non-urgent referral to urology is envisaged for treatment. Transillumination remains a useful clinical tool in order to confirm a hydrocoele or large epididymal cyst in the primary care setting.***

- **Unexplained or persistent testicular symptoms** – *pain alone in the absence of a palpable abnormality does not require imaging as this is unlikely to establish a cause.*

3.4.6. Ultrasound Groin and Ultrasound Hernia

Not indicated for direct GP referral:

- **Characteristic history and exam findings of a hernia including reducible palpable lump or cough impulse** – suggest referral to surgeons. Irreducible and/or tender lumps suggest an incarcerated hernia and require URGENT surgical referral.
- **If unsure clinically** whether there is a hernia or not - consider referral to surgery. The surgeons would like to direct any imaging themselves, in order to reduce unnecessary operations.
- **Groin pain and no palpable abnormality in young patients** - physiotherapy or watch and wait. No imaging. Please refer to the Musculoskeletal imaging guidance document for further information.
- **Groin pain and no palpable abnormality in older patients** - look for alternative cause e.g. hip osteoarthritis

3.4.7. Ultrasound Small Bowel

Not indicated for direct GP referral. Specialist referral only.

3.4.8. Ultrasound Urinary Tract

Indicated for direct GP referral (ADULTS):

- **Recurrent urinary tract infections** (≥ 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**
- **Renal calculi**
- **Pain suspected renal tract origin** - consider ultrasound rather than CTKUB as primary investigation in young female patients
- **Deteriorating renal function**
- **Advised by a hospital specialist**

Indicated for direct GP referral (CHILDREN):

- **Infants and children of all ages with clinically atypical/severe UTI** - suggest paediatric specialist referral alongside an ultrasound of the urinary tract during the acute infection to identify structural abnormalities of the urinary tract such as obstruction.
- **Infants < six months old with first-time UTI that responds to treatment**
- **Children aged 6 months and above if they have recurrent infections or have an atypical organism**

Not indicated for direct GP referral:

- Unexplained visible haematuria without urinary tract infection if ≥45years old - suggest speciality 2WW referral to urology
- Visible haematuria persists or recurs after successful treatment of urinary tract infection if ≥45 years old - suggest speciality 2WW referral to urology
- Unexplained microscopic haematuria aged ≥60 years with either dysuria or raised WBC count – suggest speciality 2WW referral to urology
- If it is the patient's first episode of UTI (adult)
- Pain not typically renal origin – consider CT or clinical referral
- Hypertension
- Children aged six months and older with first time typical UTI that responds to treatment

3.4.9. CT Renal Colic

Please note, CT Renal Colic can be requested for patients above the age of 65 if clinically appropriate, but alternative diagnoses should be considered prior to request (eg malignancy, abdominal aortic aneurysm etc).

3.4.10. CT Abdomen and Pelvis with Contrast

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

Indicated for direct GP referral:

- **Unexplained abdominal pain** – see below for exclusions
- **Palpable abdominal mass** – see below for exclusions. If the patient has an abdominal mass, please consider speciality 2WW referral alongside imaging request.
- **Elevated CA-125 with normal ultrasound pelvis** – must also refer direct to gynaecology

Not indicated for direct GP referral:

- **Abdominal pain suggestive of gallbladder pathology** – consider ultrasound abdomen
- **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

3.4.11. CT Pancreas with contrast

Indicated for direct GP referral:

- **Aged 60 and over with weight loss and any of the following**: diarrhoea, back pain, abdominal pain, nausea, vomiting, constipation, new-onset diabetes.

3.4.12. CT Thorax, Abdomen and Pelvis with Contrast

Indicated for direct GP referral only if the study is recommended by a hospital specialist

3.4.13. MRCP

Indicated for direct GP referral only if the study is recommended by a hospital specialist

3.4.14. MRI Liver/Spleen with contrast

Indicated for direct GP referral only if the study is recommended by a hospital specialist

3.4.15. MRI Pelvis (gynae/endometrium)

Indicated for direct GP referral only if the study is recommended by a hospital specialist

4. 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

5. Appendices

There are no appendices for this document.

6. Equality Impact Assessment (EIA)

Type of function or policy	Existing

Division	DCSS	**Department**	Radiology
Name of person completing form	Dr Geeta Kapoor	**Date**	27/11/23

Equality Area	Potential Negative Impact	Impact Positive Impact	Which groups are affected	Full Impact Assessment Required YES/NO
Race	x	x	N/a	No
Pregnancy & Maternity	x	x	N/a	No
Disability	x	x	N/a	No
Religion and beliefs	x	x	N/a	No
Sex	x	x	N/a	No
Gender reassignment	x	x	N/a	No
Sexual Orientation	x	x	N/a	No
Age	x	x	N/a	No
Marriage & Civil Partnership	x	x	N/a	No
EDS2 – How does this change impact the Equality and Diversity Strategic plan (contact HR or see EDS2 plan)?				

- **A full assessment will only be required if: The impact is potentially discriminatory under the general equality duty**
- **Any groups of patients/staff/visitors or communities could be potentially disadvantaged by the policy or function/service**
- **The policy or function/service is assessed to be of high significance**

IF IN DOUBT A FULL IMPACT ASSESSMENT FORM IS REQUIRED

The review of the existing policy re-affirms the rights of all groups and clarifies the individual, managerial and organisational responsibilities in line with statutory and best practice guidance.