



***Direct Access to CT of Chest/Abdomen/Pelvis for
Patients with Unidentified Suspected Malignancy***

**Imaging Pathway from Primary Care for NHS Greater
Glasgow & Clyde**

Adapted from Scottish Clinical Imaging Network Pathway Oct 2015

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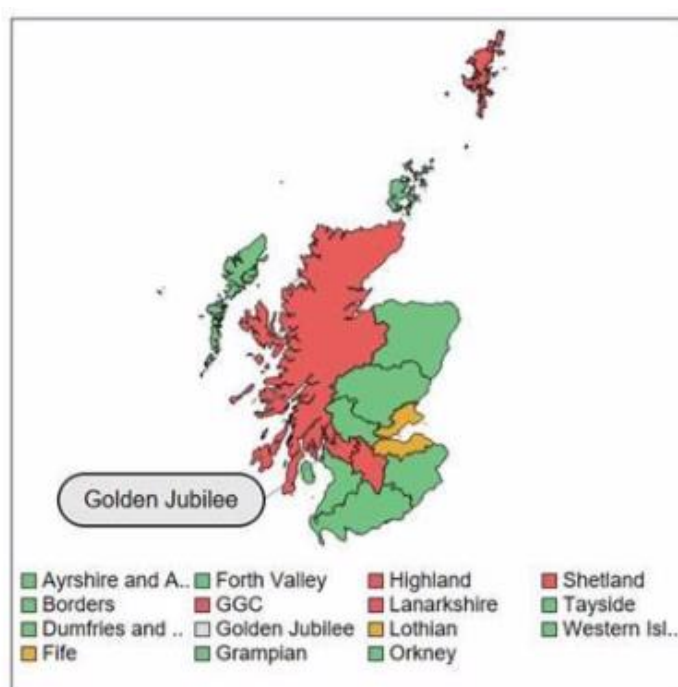
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Introduction

The Scottish Government's Healthcare Quality Strategy lays out a blueprint for patient care in Scotland, with safety, equity, efficiency and timeliness at its heart.

There is currently highly variable direct access for CT scanning for Primary Care Practitioners in Scotland illustrated in the map below. There are some areas which provide this access for General Practitioners for specific indications and others that do not. The Scottish Clinical Imaging Network (SCIN), which is one of 4 National Managed Diagnostic Networks under the auspices of National Services Division (NSD), set up a subgroup in 2014 to look specifically at this issue.

CT access from Primary Care across Scotland in 2019:



	Key
GREEN	GP access permitted
RED	No GP access permitted
AMBER	Work on-going to support GP access
GREY	Not applicable

In those areas with access to CT scanning this has been used appropriately with high rates of detection of cancer and significant other pathology.

Research has not demonstrated any increase in demand from patients nor test use.¹ Direct access **avoids** a substantial proportion of outpatient appointments **reduces** waiting times, is **preferred** by patients and generally cuts costs **without** increasing GP workload.² Direct access also reduces waiting times and is associated with high satisfaction for both patients and clinicians.³

The SCIN group, with Imaging and Primary Care representation, focused on patients with unidentified suspected malignancy, who the GPs felt were most difficult to manage without access to CT scanning. The lack of a defined pathway for this group of patients leads, in some cases, to delays in referral to the correct specialty. This aligns to the core role of general practitioners in the Scottish GP contract: “The key direct clinical care role for the GP as expert medical generalist is in undifferentiated presentations which require the skills of a doctor trained in risk management and holistic care with broad medical knowledge.”

Direct access for GPs to CT scanning of chest/abdomen/pelvis for this group of patients could enable a cancer diagnosis to be made directly from primary care and aid more appropriate onward secondary care referral. In other cases, it could guide the GP how best to manage the patient within a primary care setting.

This document outlines the SCIN pathway developed by the group for this specific group of patients, through consultation with Imaging and Primary Care colleagues from across Scotland which is adapted for use in NHS Greater Glasgow & Clyde. The pathway has been based on the principles outlined in the document ***Quality Imaging Services for Primary Care: A Good Practice Guide (2012)*** which was produced in collaboration between the Royal College of General Practitioners, the Royal College of Radiologists and the Society and College of Radiographers.

Underlying Principles

1. There should be equity of access in relation to this pathway for GPs
2. All Imaging should be undertaken in compliance with the Ionising Radiation (Medical Exposure) Regulations 2000 (IR(ME)R) and subsequent amendments
3. The service should be of the same quality to that of secondary care imaging
4. Referrals for this specific patient group should have the same prioritising for acquisition and reporting as equivalent secondary care scans.
5. This does not replace current pathways for USoC referrals for patients with site specific symptoms.

Recommendations for Implementation of the Pathway

1. Details of the pathway is communicated to all GP practices and Imaging services
2. This pathway has been piloted and audited over a 3 month period in NW Glasgow HSCP. Summary of pilot results can be found in Appendix 1.

Pathway for Primary Care Direct Access to CT of Chest/Abdomen/Pelvis for Patients with Unidentified Suspected Malignancy

Referral Criteria

1. Clinical assessment of patient by General Practitioner leading to very strong suspicion of suspected underlying malignancy with, for example, unexplained significant weight loss of > 10% body weight.*
2. If there is any indication of localising clinical features or results from investigations to suggest malignancy in a specific system, direct USoC referral to secondary care should be made to ensure cancer tracking and waiting times monitoring is activated.
3. Prior to requesting a CT scan of chest/abdomen/pelvis the GP must ensure the following has been completed.
 - Appropriate history & examination including psychosocial assessment
 - Relevant blood testing (including FBC to exclude anaemia and blood cancers **and** eGFR if not done within the last 3 months to allow contrast)
 - CXR
 - Consideration of principles of realistic medicine
4. CXR - no evidence of primary intrapulmonary malignancy. (See point 2)
5. Patient is 40+ years of age. For patients under 40 use of existing referral pathways and/or discussion with consultant colleagues initially.
6. Exclude pregnancy. If patients are known to be pregnant CT CAP is not an appropriate investigation. If significant concern discuss with obstetrician. If possibility of pregnancy cannot be excluded discuss with radiologist prior to referral.

*Useful guidance on assessment of unintentional weight loss can be found in [BMJ Best Practice](#) and a [BMJ clinical review for older adults](#)

Communication with Radiology

Dialogue with the local radiology department should not be routinely necessary if the patient fulfils all the criteria for this pathway. It is, however, recommended if there is uncertainty as to the suitability for a CT scan via duty radiologist.

Booking of scan

1. Request a CT of chest, abdomen and pelvis uses Ordercomms Radiology. (See FAQs)
2. Should there be any need to make a request on paper (e.g. for cross-border practices) please include contact details in case of any issues with the request and to communicate urgent significant results or non-attendance.
3. Referrer must include all relevant information at point of request to comply with the referral criteria. This will be aided by an ICE process embedded in Ordercomms.
4. Ordercomms will default priority to urgent suspicion of cancer to comply with prioritised referral to report time.
5. Ensure that a current (within 3 months) eGFR result is available to avoid unnecessary delayed. Contrast CT scans can compromise impaired renal function. Further safety questions relating to asthma, diabetes and allergies are built into request process.

Receipt of Report

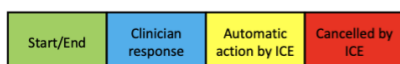
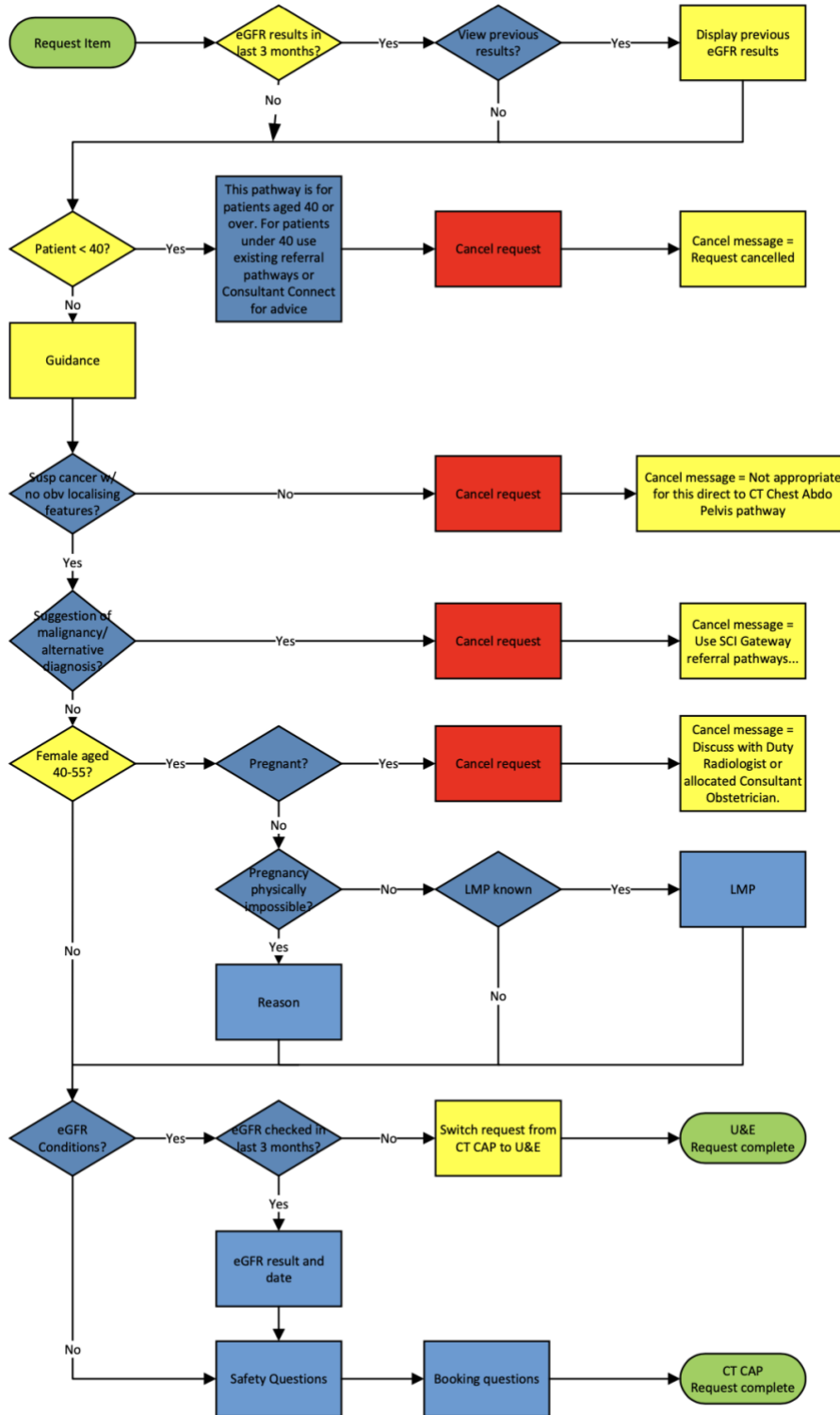
1. Obtain report from Radiology via current reporting mechanisms for other radiological investigations. Reports are also available on clinical portal.
2. Contact Radiology by phone if any queries with the report
3. Responsibility for reading and acting on the results, including onward referral, lies with the referrer.
4. Each radiology service has a process for the communication of urgent results.
5. Each radiology service has a process for the communication of non-attendance for urgent investigations.
6. Each Radiology service has a process in place for the communication of critically urgent findings which require action that day. This would normally be via a telephone call to the GP surgery during normal working hours.
7. The GP out-of-hours service should only be informed out of normal working hours if there are immediate and high-risk findings (such as dissection of AAA).
8. If the scan is positive for malignancy, the reporting radiologist should activate a cancer tracking mechanism, in order to ensure that the results are acted upon. (T

coded). Additional communication to primary care should be undertaken highlighting these results.

Recommendations for Radiology Services and for Primary Care

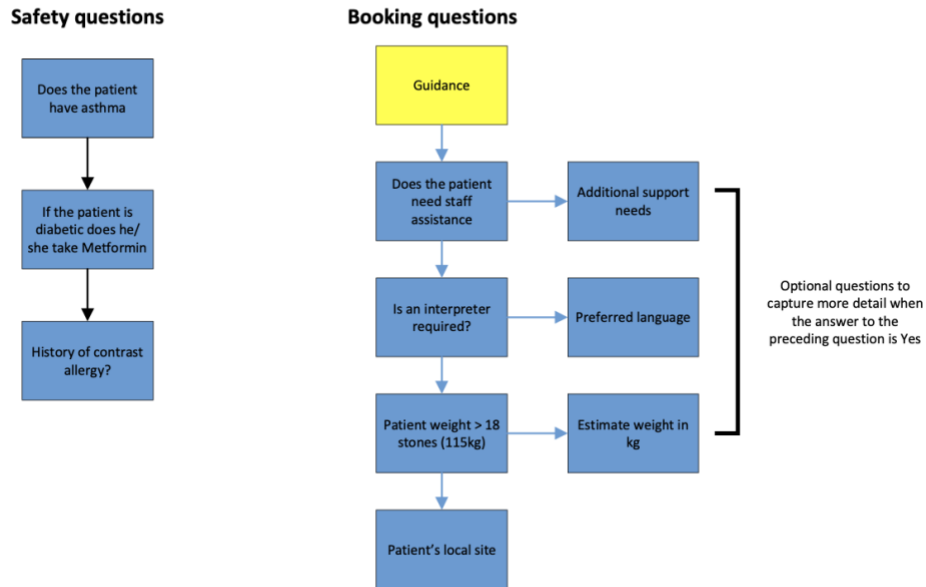
1. Each radiology service should ensure that adequately staffing and resources are in place to support this pathway to avoid adverse impact on the existing service
2. Radiology services should consider the institution of a Duty Radiology system if not already in place. Currently Radiology Trainees have duty system for enquiries.
3. All requests for this service should be vetted – the request should be queried or refused if deemed inadequate information or not meeting referral criteria and this information urgently fed back to the referrer.
4. Radiology services should consider appointing a Primary Care Lead radiologist as the liaison with general practitioners. They would have responsibility for coordinating contact between the two groups of professionals, audit and education.
5. Each radiology service should set up a regular meeting with GP representation to follow up on issues with this service.
6. Each Radiology service should audit the referral patterns for this pathway.
7. Each radiology service should engage in regular training sessions for local GPs on referral for complex imaging.
8. Radiologists should continue to word their reports to aid the referrer
 - giving guidance on benign findings and what issues require onward referral
 - See also Royal College of Radiologists guidance⁴
9. If trainee Radiologists are available within your board area, they should be involved in the local system of dialogue with primary care referrers as part of their training.
10. Consideration of setting up a single centralised point of contact into Radiology for Primary care colleagues if this is deemed a more efficient use of resources

ICE: CT CAP Proposed Question flow v5



Last Revision GP 06/08/2021

ICE: CT CAP Proposed Question flow v5



Clinicians consulted during development of pathway:

Dr. Douglas Rigg. Lead GP for Cancer, NHS GG&C

Dr. Ross MacDuff. Clinical Lead Radiology, NHS GG&C.

Dr. John Ip. NHS GG&C GP sub-committee.

Dr. Pauline Grose. Consultant Physician, GRI.

Dr. Anne MacKillop. Consultant Oncologist & lead clinician Cancer Unknown Primary Service. QEUH, Glasgow.

FAQs

GP Sub-committee queries and responses in red (Dr Rigg and Dr MacDuff)

1. That this pathway for CT CAP should not lead to changes in any other USOC pathway e.g., referrals sent back to referrer and told to order a CT CAP.

No changes to current pathways foreseen. This is a new pathway to cover the gap in the current system for patients without localising symptoms.

2. Will CT reports that positively identify a malignancy be Cancer Tracked?

All radiology reports on this pathway that are suspicious of malignancy will be tracked by the extant T coding system.

3. Helpful to have a duty radiologist contact for any GP questions about the CT report.

Agreed - will need to see how this might work in practice during pilot phase.

4. If a scan shows a malignancy, GP need to know which speciality is most appropriate for onward referral.

Radiology reports typically include the suspected source of the underlying primary or a comment suggesting no obvious primary identified.

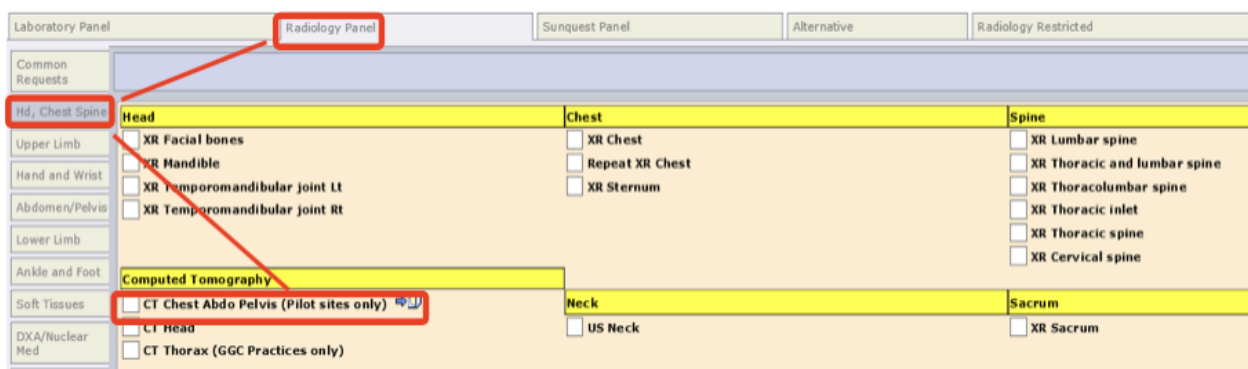
5. CT reports should not be phoned to OOHs unless there is an immediate and high-risk need. E.G ruptured AAA or dissection (should be v rare).

Agreed - this aligns with the current radiology guidance.

6. What safety net or recall will be in place for patients who DNA their CT CAP? We hear often anecdotal reports of letters are not delivered or the wrong address. Will be same as for current radiological investigations – requester will receive notification of DNA. The Scottish Patient Safety Programme recommends that practices have a safety netting system in place to ensure all requests and results are matched.

7. Where can I request the scan on ordercomms?

Item placement: **Radiology Panel** -> **HD, Chest, Spine** tab -> **Computed Tomography** section



Common Requests	Head	Chest	Spine
Hd, Chest Spine	<input type="checkbox"/> XR Facial bones	<input type="checkbox"/> XR Chest	<input type="checkbox"/> XR Lumbar spine
Upper Limb	<input type="checkbox"/> XR Mandible	<input type="checkbox"/> Repeat XR Chest	<input type="checkbox"/> XR Thoracic and lumbar spine
Hand and Wrist	<input type="checkbox"/> XR Temporomandibular joint Lt	<input type="checkbox"/> XR Sternum	<input type="checkbox"/> XR Thoracolumbar spine
Abdomen/Pelvis	<input type="checkbox"/> XR Temporomandibular joint Rt		<input type="checkbox"/> XR Thoracic inlet
Lower Limb			<input type="checkbox"/> XR Thoracic spine
Ankle and Foot			<input type="checkbox"/> XR Cervical spine
Soft Tissues	Computed Tomography		
	<input type="checkbox"/> CT Chest Abdo Pelvis (Pilot sites only)	<input type="checkbox"/> Neck	<input type="checkbox"/> Sacrum
DXA/Nuclear Med	<input type="checkbox"/> CT Head	<input type="checkbox"/> US Neck	<input type="checkbox"/> XR Sacrum
	<input type="checkbox"/> CT Thorax (GGC Practices only)		

References

1. The effect of direct referral for fast CT scan in early lung cancer detection in general practice. A clinical, cluster-randomised trial. *Guldbrandt LMDan Med J.* 2015 Mar; 62(3)
2. Roland M, McDonald R, Sibbald B. Chapter 3: transfer to primary care. In: Outpatient services and primary care. A scoping review of research into strategies for improving outpatient effectiveness and efficiency. Manchester: National Primary Care Research
3. Smith C, Tompson A, Jones N et al. Direct access cancer testing in primary care: a systematic review of use and clinical outcomes *Br J Gen Pract* 2018; 68 (674): e594-e603
4. Royal College of Radiologists: <https://www.rcr.ac.uk/publication/management-incidentals-findings-detected-during-research-imaging>
5. Recovery and Redesign: Cancer Services – action plan. Scottish Govt Dec 2020. <https://www.gov.scot/publications/recovery-redesign-action-plan-cancer-services/>

Appendix 1 NW HSCP Pilot Summary:

In NW HSCP, a 3-month pilot for CT CAP direct access for patients with suspected cancer but no obvious primary site has been completed.

This has been well received with 100% of GPs who responded to a follow up survey supporting roll out across GG&C.

Summary of findings:

Total CTs requested - 68 in 3 months.

Completed: 65 (1 deceased, 1 admitted, 1 unclear –appears to be an A&E req rather than GP)

Mean days from request to report: 20 days (longest 32 days) – this aligns with secondary care time frames for this indication.

Mean days image to report: less than 3 days. 92% reported within 7 days.

Total cancers detected (%): 13.8

Possible additional/early cancers (%): 15.4

Significant other pathology (%): 13.8

(Total significant findings in 43%)

Incidental findings requiring further GP action (%): 6

Comments/observations:

- Pathway also being used for further investigation as advised by radiology – these patients where initial investigation (e.g. CXR) is abnormal should be referred on USC pathways to ensure cancer tracking and waiting times activated.
- Referrers threshold for wgt loss different – this needs to be in context of clinical situation. We have included a BMJ clinical review guidance for assessing weight loss in elderly.
- Some patients could have had more extensive investigations prior to using this pathway that may have avoided need for CT CAP (one example is PR and PSA).
- Encourage use of existing referral pathways to ensure most appropriate investigation prioritised (e.g. for abnormal PSA, colorectal pathways)
- Emphasise need for realistic medicine discussions when considering investigations
- Process for EDT transfer of results to primary care underway to minimise delays