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

1. Background

The Scottish Clinical Imaging Network (SCIN), which is one of four National Managed Diagnostic Networks under the auspices of National Services Division (NSD), set up a subgroup in 2014 to develop guidelines for primary care direct access to CT of chest, abdomen and pelvis (CAP).

The SCIN group, with Imaging and Primary Care representation, focused on patients with unidentified suspected malignancy, whose pathway would be 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."

This document reflects an update to the guidelines developed by SCIN and takes into account the development of Rapid Cancer Diagnostic Services.

There are two potential routes for primary care referral where there is a suspicion of unidentified malignancy:

1. If a patient presents with unusual persistent changes and the primary care clinician wants a test result only and would be reassured by a negative result and happy to manage the patient thereafter a direct referral to CT should be made.

2. Where a patient presents with non-specific symptoms and the primary care clinician wishes a clinical assessment as well as a CT scan &/or other investigations, a referral should be made to the local Rapid Cancer Diagnostic Service (RCDS), where available.

2. Primary Care Access to CT

Direct access to CT scanning of chest/abdomen/pelvis for the group of patients reflected under section one above 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 primary care clinician on how best to manage the patient within a primary care setting. Direct access to CT allows a primary care clinician to receive a report of findings on a CT scan only. If the primary care clinician then has a query about

the report, they would need to contact the Radiologist and may need advice on how to manage the patient following receipt of the CT report.

Where services have introduced this pathway, research has not demonstrated any increase in demand from patients nor test use.[1] Direct access ***avoids*** a substantial proportion of outpatient appointments, ***reduces*** wait to diagnosis, is ***preferred*** by patients and generally cuts costs ***without*** increasing primary care's workload. [2] Direct access also reduces waiting times and is associated with high satisfaction for both patients and clinicians. [3]

The recommendations in this guidance document are for the management of patients with unidentified suspected malignancy and highlight the required level of primary care access to CT across NHS Scotland for this patient cohort only. It is recognised, however, that a number of Health Boards are in a position to offer a wider range of access to CT for other conditions which should be unaffected by this guidance.

3. Rapid Cancer Diagnostic Service (RCDS)

There has been disparity in how cancer patients that present with non-specific symptoms (including weight loss, fatigue, nausea) enter and flow through NHS Scotland, compared to those with site-specific symptoms that are reflected in the Scottish Referral Guidelines for Suspected Cancer. The Rapid Cancer Diagnostic Service has been developed within existing NHS Scotland infrastructure with an aim to reduce this variation and work towards delivering equity of access for all patients with a suspicion of cancer in Scotland. The RCDS provides primary care with a single-point of access to a person-centred fast-track diagnostic pathway for this currently underserved patient cohort. The RCDS result in fewer hospital visits for patients, providing them with the right tests in the first instance. This is in contrast to patients having sequential referrals to different specialties, with a risk of inadvertent, unnecessary or repeat investigations until a diagnosis is confirmed, be it cancer or another serious condition. There is a small cohort of complex patients moving through any service at one time enabling effective clinical triage, rapid radiology reporting and speedy onward referral to specialty services (for both cancer and non-cancer conditions).

The Rapid Cancer Diagnostic Service (RCDS) offers a holistic assessment of the patient by a multi-disciplinary team and usually includes a CT scan as part of the investigations. The team are then able to discuss all the findings with each other and with the patient. Where an RCDS is available within the Health Board and a patient meets the criteria then this should be used.

4. Referral Pathway

This document includes an updated SCIN pathway for primary care direct CT access developed for the specific group of patients outlined under section 1, through consultation with Imaging and Primary Care colleagues from across Scotland that

should be adapted for use in Health Boards not already providing this service. 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.

a) Underlying Principles

1. There should be equity of access in relation to this pathway for primary care clinicians.

2. All Imaging should be undertaken in compliance with the Ionising Radiation (Medical Exposure) Regulations 2017 (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 USC referrals for patients with site-specific symptoms.

b) Referral Criteria

1. Clinical assessment of a patient by a primary care clinician leads to a 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 USC 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 primary care clinician 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);
    - Chest X-ray;
    - Consideration of the 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 duty Radiologist initially.

6. Exclude pregnancy in patients 55 years of age and under. LMP date for patients should be included on referral and also indicate if not relevant (e.g. hysterectomy). 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

c) Booking of scan

1. This should be carried out using Health Board local processes, however booking of scans should be done within the same timescale and urgency as urgent suspicion of cancer (USC) referrals via secondary care.

d) 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 practice 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, PE, Cord compression).

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 as per Health Board process. Additional early communication to primary care should be undertaken to allow communication of the results from primary care to the patient.

e) Recommendations for Radiology Services and Primary Care

1. Each Radiology service should ensure that adequate 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 and communicate details of this to Primary Care colleagues.

3. All requests for this service should be vetted – the request should be queried or refused if inadequate information provided or referral criteria is not met with this detail urgently fed back to the referrer.

4. Radiology services should consider appointing a Primary Care Lead Radiologist as the liaison with primary care clinicians. 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 their Health Board's Lead Cancer GP to follow up on any issues or areas for improvement with the 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 GP practices 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' guidance[4]

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 in Radiology for primary care colleagues, which may be deemed a more efficient use of resources.

5. Primary Care Direct Access to CT - Audit Results

Audit data from two Health Boards who have implemented direct access to CT for unidentified suspected malignancy is presented below:

a) <u>NHS Grampian</u>

Data was provided for each year from 2017 until 2021 with results aggregated and summarised as follows:

Date Range	Number of scans performed	Number of Cancers identified	Further Investigation Required	No cancer or other significant finding
2017-2021	1178	285	304	589
%		24.2%	25.8%	50%

b) <u>Greater Glasgow and Clyde</u>

Total Requests	Total Scanned	% Cancers	% possible additional/early cancer	Other significant pathology	Incidental finding requiring further GP action
68	65	13.8%	15.4%	13.8%	6%

43% of examinations had a significant finding with a further 6% requiring primary care follow- up.

6. Summary Recommendation

a. If a patient presents with unusual persistent changes and the primary care clinician wants a test result only and would be reassured by a negative result and happy to manage the patient thereafter a direct referral to CT should be made.

b. Where a patient presents with non-specific symptoms and the primary care clinician wishes a clinical assessment as well as a CT scan &/or other investigations, a referral should be made to the local Rapid Cancer Diagnostic Service (RCDS), where available.

c. Patient presents with symptoms that align to Scottish Referral Guidelines for Suspected Cancer, urgent suspicion of cancer (USC) referral should be made via site-specific pathway.

7. 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-incidental-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/