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The Association of Coloproctology of Great Britain & Ireland

SoR THE SOCIETY OF RADIOGRAPHERS

Clinical Radiology
The Royal College of Radiologists

Computed tomography colonography and lower gastrointestinal cancer pathways

Planning for the next decade

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Contents

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Introduction

The NHS Long Term Plan prioritises improved survival from cancer, recognising that rapid diagnosis is essential to identify tumours at an earlier, more curable stage. Over 42,300 people are diagnosed with bowel cancer every year in the UK, affecting 1 in 15 men and 1 in 18 women during their lifetime, and it is the second leading cause of cancer-related death. 44% of patients are aged 75 and over, with the highest incidence in those aged 85–89. Computed tomography (CT) colonography (CTC) is an established radiological technique to assess the large bowel for colorectal cancer (CRC) and polyps in patients with symptoms suggestive of CRC. It is an essential tool to support colonoscopy services providing over 120,000 examinations a year and 8% year on year growth in referrals from 2014–2019.

- NHS Long Term Plan. Chapter 3: Further progress on care quality and outcomes. Cancer. NHS 2019. www.longtermplan.nhs.uk/online-version/chapter-3-further-progress-on-care-quality-and-outcomes/better-care-for-major-health-conditions/cancer/
- Bowel Cancer UK. Bowel cancer: Facts and figures about bowel cancer. www.bowelcanceruk.org.uk/about-bowel-cancer/bowel-cancer/ [Accessed October 2022]
- Cancer Research UK. Bowel cancer statistics. www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/bowel-cancer. [Accessed October 2022]

Public Health England recognised in its 2017 Atlas of Variation of Diagnostic Services in England that '*Poor levels of provision of lower GI diagnostic testing could result in late stage of diagnosis of colorectal cancer, higher rates of emergency presentation both of which lead to poor survival and higher mortality rates*'. This highlighted close to a 250-fold difference between English clinical commissioning groups (CCGs) for access to CTC from the mean of 13.5 scans per 10,000 weighted population (range 0.2 to 58.2).

- Public Health England. The 2nd Atlas of Variation in NHS Diagnostic Services in England. PHE, 2017. https://fingertips.phe.org.uk/documents/DiagnosticAtlas_FINAL.pdf

This document represents a vision for future development of NHS CTC services and has been produced as a multidisciplinary collaboration between the British Society of Gastrointestinal and Abdominal Radiology (BSGAR), the Royal College of Radiologists (RCR), the Society and College of Radiographers (SCoR), the Gastro Intestinal Radiographers Special Interest Group (GIRSIG) and other stakeholders including the National CT Colonography Training and Accreditation Programme and the Association of Coloproctology of Great Britain and Ireland (ACPGBI).

It outlines the key components required of CTC services to meet the needs of patients and clinicians in primary and secondary care and highlights the referral pathways, quality assurance, leadership, organisation and resource requirements necessary to deliver a better patient experience and outcomes. Its intention is to outline the necessary components to build a uniform provision of high-quality CTC services across the NHS in England for patients.

It is expected that the number of diagnostic tests needed to exclude CRC will substantially increase over the next decade. As the demands on colonoscopy services increase with expansion of bowel cancer screening and surveillance programmes (BSCPs), it is likely that CTC provision will need to increase substantially to provide the necessary capacity for investigation of symptomatic patients.

The key components necessary for CTC services to develop and improve should include:

- Increased CT scanner provision
- CTC service managers
- Investment to train an experienced multidisciplinary workforce
- Local leadership teams monitoring and developing CTC services
- Formation of collaborative networks to share local expertise and training opportunities and to coordinate delivery of services
- Data submission from all NHS services for audit against published standards
- Commissioning a national CTC training and accreditation programme for radiographers and radiologists performing or interpreting CTC
- Funding a national cloud-based CTC case interpretation repository for training and accreditation
- Funding a national cloud-based CTC quality assurance portal to evaluate performance in those already trained and accredited
- Research funding prioritisation to improve patient risk stratification and investigation triage to maximise patient flow, diagnostic yield and productivity
- Effective pre-test triage with widely available and nationally standardised faecal immunochemistry test (FIT) testing.

This document builds on the existing BSGAR/RCR CTC standards for symptomatic patients (2021), which provide technical and process standards, evidence-based quality measures and performance indicators, and audit definitions and templates. While CTC for the English NHS BCSP is not considered, since it has a separate pathway and guidelines (Bowel cancer screening: guidelines for CTC imaging 2021), some of these recommendations will be relevant. To turn these recommendations into reality, NHS services will need to invest in workforce development and training, data analytics, operational structures and educational infrastructure to support the service accreditation needed to improve CRC outcomes.

- BSGAR/RCR. Standards of practice for computed tomography colonography (CTC). Joint guidance from the British Society of Gastrointestinal and Abdominal Radiology and The Royal College of Radiologists. RCR, 2021. www.rcr.ac.uk/publication/standards-practice-computed-tomography-colonography-ctc-joint-guidance-british-society
- Public Health England. Bowel cancer screening: guidelines for CTC imaging. PHE, 2021. www.gov.uk/government/publications/bowel-cancer-screening-imaging-use/bowel-cancer-screening-guidelines-for-ctc-imaging#ctc

Methodology

A multidisciplinary group was formed by 19 recognised experts from radiology, radiography, gastroenterology and colorectal surgery across England. A small leadership group produced themes for wider discussion by the whole group. These themes were then developed into statements with anonymous voting by the whole expert group using a modified Delphi approach until consensus was reached, classed as more than 80% of those voting in favour.

Referral pathways

1. CTC is a first line test for the exclusion of CRC and large polyps in patients with symptoms suggestive of bowel cancer.

Colonoscopy and CTC are both appropriate investigations for these indications and local patient pathways will be determined by capacity, underlying risk of colorectal neoplasia and clinical preference. The relevant symptoms and thresholds for urgent referral for exclusion of CRC are provided in National Institute for Health and Care Excellence (NICE) Guideline 12.

- NICE. Suspected cancer: recognition and referral: Chapter 1.3 Lower gastrointestinal tract cancers. NICE, London 2021. www.nice.org.uk/guidance/ng12

2. CTC is also indicated for

- **Incomplete colonoscopy performed for:**
  - **New symptoms suggestive of CRC**
  - **Colorectal surveillance**
- **Patients with abdominal symptoms requiring extracolonic evaluation in addition to colonic assessment**
- **Patients with significant comorbidities increasing the risk of colonoscopy who require:**
  - **Investigation of new symptoms suggestive of CRC**
  - **Colorectal surveillance**
- **Previous failed colonoscopy where a repeat attempt is considered unlikely to be successful**
- **Patient choice/colonoscopy refusal in symptomatic patients where appropriate counselling has been provided.**

Decision-making when selecting the most appropriate test for a patient relies on a full appreciation of the requirements for both colonoscopy and CTC. Patients should be evaluated holistically for their suitability to undergo bowel preparation, which is required for all whole-colon investigations, and this will be influenced by the type and volume of bowel preparation, perceived patient burden from the preparation, their frailty and other comorbidities. This holistic assessment will inform whether colonoscopy or CTC is the most suitable investigation or whether a standard CT abdomen and pelvis, without bowel preparation, will provide sufficient accuracy to triage the patient's care. Decisions on pathways will be influenced by capacity of radiology and endoscopy services as well as patient characteristics including *a priori* risk of colorectal neoplasia (see below). Colorectal

pathway design and referral decisions for individual patients should be made collaboratively between radiology and clinical specialty teams.

Guidance has been published recently that outlines the role of quantitative FIT in symptomatic patients. When FIT levels are high then yield of colonic abnormality is greatest and colonoscopy is intuitively more attractive to allow biopsy and therapy and minimise the number of additional tests. The optimal role of CTC at lower FIT levels is yet to be determined.

- Monahan KJ, Davies MM, Abulafi M *et al.* Faecal immunochemical testing (FIT) in patients with signs or symptoms of suspected colorectal cancer (CRC): a joint guideline from the Association of Coloproctology of Great Britain and Ireland (ACPGBI) and the British Society of Gastroenterology (BSG). *Gut* 2022; **71**: 1939–1962.

Colonoscopy is the first-line test for colonic surveillance at increased hereditary risk of cancer or after previous polypectomy or CRC resection because of a higher detection rate of new or recurrent cancer and polyps compared with CTC. This should be performed by an appropriately trained colonoscopist to maximise detection of these abnormalities. CTC has a secondary supporting role in selected cases. When substantial comorbidities preclude colonoscopy then the risk/benefit of this surveillance should be carefully evaluated before CTC is requested.

CTC may be considered in symptomatic patients with diverticular disease (who are without acute signs of sepsis or a clinical suspicion of acute diverticulitis or perforation) where colon cancer is a potential differential diagnosis or in those where endoscopic assessment has failed. It should be avoided in acute diverticulitis or within six weeks of diverticular perforation, where standard CT of the abdomen and pelvis is considered more appropriate.

- Monahan KJ *et al*. Guidelines for the management of hereditary colorectal cancer from the British Society of Gastroenterology (BSG)/Association of Coloproctology of Great Britain and Ireland (ACPGBI)/United Kingdom Cancer Genetics Group (UKCGG). *Gut* 2019; **0**: 1–34. www.bsg.org.uk/wp-content/uploads/2019/12/Guidelines-for-the-management-of-hereditary-colorectal-cancer.full_.pdf
- Rutter MD *et al*. British Society of Gastroenterology/Association of Coloproctology of Great Britain and Ireland/Public Health England post-polypectomy and post-colorectal cancer resection surveillance guidelines. *Gut* 2020; **69**: 201–223.

3. CTC should be generally avoided in the following groups.

- **Patients too unfit to undergo a CTC procedure**
- **Where symptoms indicate inflammatory bowel disease (IBD)/microscopic colitis is the suspected diagnosis**
- **Surveillance of patients with IBD**
- **Patients with anal canal symptoms**
- **Patients under 40 years old with bowel symptoms**
- **Patients with recent CT imaging of the abdomen and pelvis where optical colonoscopy could be performed**

Colonoscopy or flexible sigmoidoscopy are considered the most appropriate first-line tests for patients in these categories unless there are relevant additional considerations, which should always be included in referral information.

Patients who are unable or unwilling to take bowel preparation and necessary dietary modification to investigate their symptoms are not suitable for CTC, as this compromises the detection of colorectal abnormalities. Where malignancy or clinically relevant benign diseases are a probable cause for symptoms, a standard CT of the abdomen and pelvis or minimal preparation CT should be considered as an alternative test in these patients, as well as in those who are unfit to undergo a CTC procedure.

CT colonography is less sensitive than colonoscopy for the diagnosis of IBD and colitis, dysplasia in the colon related to IBD, or abnormalities of the anal canal, and it should be generally avoided in these situations.

Finally, where a patient has bowel symptoms and a recent abdominopelvic CT scan has been performed that does not provide an explanation but has evaluated the extracolonic structures then colonoscopy is preferred.

4. Lower GI pathway design and patient triage should minimise the number of patients having both endoscopy and CTC.

Pathway design should aim for maximum efficiency when performing tests to minimise 'double assessments'; for example, using CTC for patients with previous failed colonoscopy or where CT of the abdomen and pelvis is performed after a negative colonoscopy. Triage should take account of factors including the *a priori* risk of underlying colonic and/or extra colonic abnormalities based on patient history, colonic and extra colonic symptoms, and FIT level.

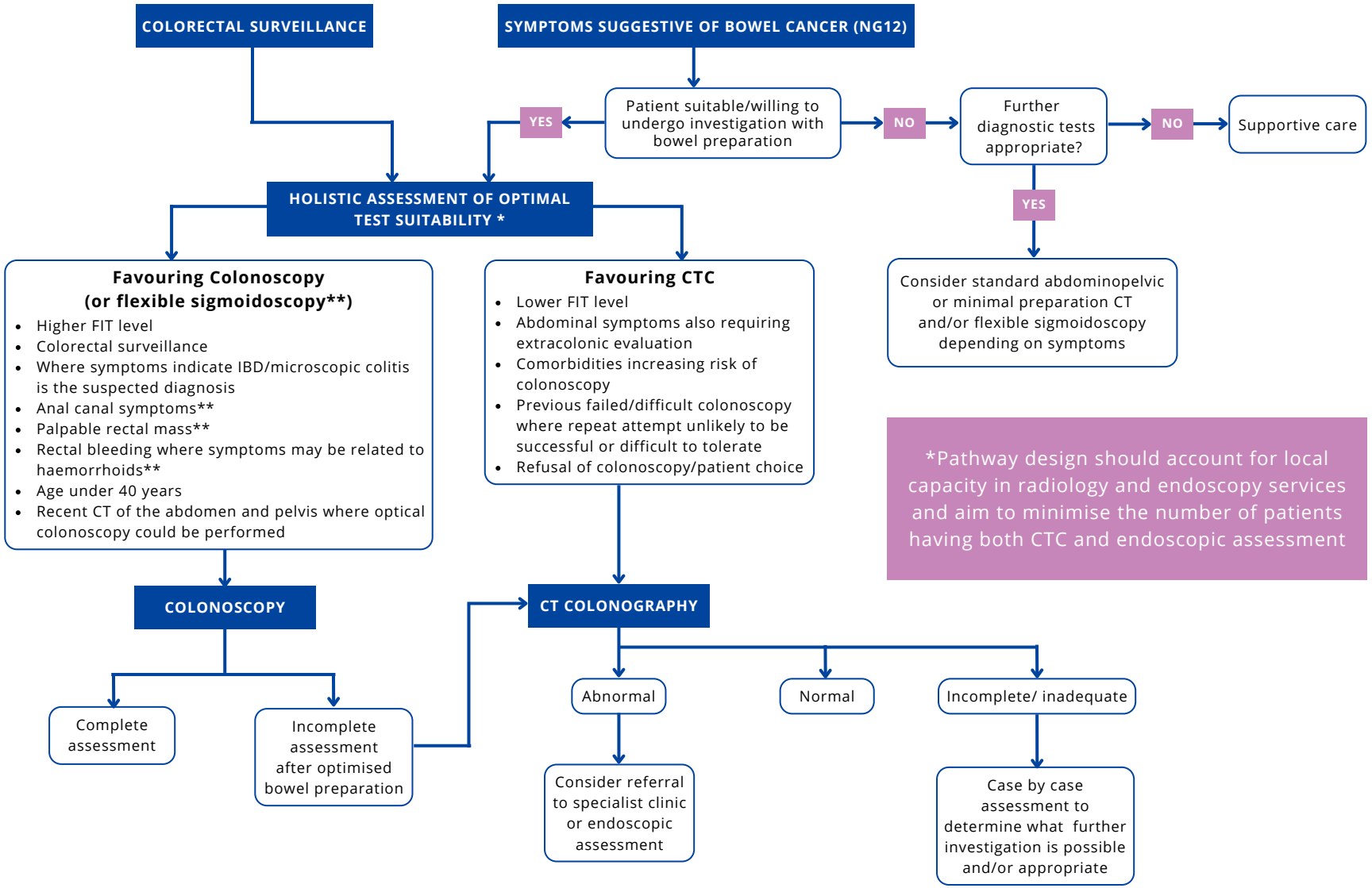
Relevant factors favouring first-line colonoscopy (or flexible sigmoidoscopy) may include high FIT level, palpable rectal mass, rectal bleeding where symptoms may be related to haemorrhoids or where colitis is the most likely diagnosis. The conversion rate to endoscopy after CTC is a BSGAR quality standard that should be monitored to evaluate pathway performance and efficiency.

Improved patient risk stratification and investigation triage is a research priority to maximise patient flow, diagnostic yield and productivity.

5. Clinical information provided with CTC referral must match locally agreed referral criteria.

Where exceptional cases arise requiring referral outwith agreed criteria, these should be indicated and explained clearly in the clinical information provided, along with the justification for selecting CTC rather than the usual agreed first-line examination. This is also essential to comply with Ionising Radiation (Medical Exposure) Regulations (IR(ME)R) requirements.

Proposed pathway flow diagram for lower GI investigation



Quality assurance

1. CTC services should produce a quality assurance report every three years using RCR/BSGAR standards.

RCR/BSGAR standards state: '*when performed to the highest quality, CTC has excellent diagnostic accuracy for clinically-significant neoplasia ... However, analogous to colonoscopy, substantial variation in practice has been observed in the UK and internationally*'. Uniform quality assurance processes are therefore fundamental to develop service standards across the NHS.

- BSGAR/RCR. Standards of practice for computed tomography colonography (CTC). Joint guidance from the British Society of Gastrointestinal and Abdominal Radiology and The Royal College of Radiologists. RCR, London 2021. www.rcr.ac.uk/publication/standards-practice-computed-tomography-colonography-ctc-joint-guidance-british-society

In order to align the frequency of mandatory audit required for BCSP and symptomatic CTC services to the current standards, it is proposed that a service audit is performed every three years evaluating 2019 data with the next audit years falling in 2022, 2025 and so on (rather than two years as published in recent RCR/BSGAR standards). A coordinated approach will allow better comparison of CTC services and identify areas for improvement. However, it is anticipated that this frequency will decrease when automated dashboards are developed, reducing the resources needed to collate the data and allowing real-time evaluation of service performance. These reports should be available for inspection by CQC, BCSP and NHS commissioners to demonstrate appropriate service standards are being met.

National audit data collection and analysis will require resource allocation to identify outlying services similar to systems embedded in the NHS BCSP. This data will also inform amendments of future BGSAR/RCR standards over time.

- Plumb AA, Halligan S, Nickerson C *et al.* Use of CT colonography in the English Bowel Cancer Screening Programme. *Gut* 2014; **63**(6): 964–73.
- Johnson CD, Chen MH, Toledano AY *et al.* Accuracy of CT colonography for detection of large adenomas and cancers. *N Engl J Med* 2008; **359**(12): 1207–17.

2. CTC services should use structured report templates for reporting all examinations using the format indicated in BCSP.

The report template for the BCSP has been developed to provide uniform evaluation of CTC procedures to upload into the Bowel Cancer Screening Services (BCSS) database and ease of audit and monitoring for CTC service providers. This allows recording and categorisation of most features that are needed for quality assurance assessment. Since these features are also required for RCR/BSGAR standards audit then it is logical to apply this template to symptomatic CTC reporting, and this approach is recommended. This will also facilitate future automated quality assurance tool development.

3. CTC services should comply with the recommended service benchmarking and audit guidance provided by RCR/BSGAR and SoR.

In addition to BSGAR/RCR and BCSP standards, the SoR-endorsed National Best Practice Guidelines for the CT Colonography Service should be adopted by services for training and assessment of radiographers performing CTC, and wider RCR/SoR CT service standards should also be considered.

- Society of Radiographers. National Best Practice Guidelines for the CT Colonography Service. SCoR, London 2018. www.sor.org/learning-advice/professional-body-guidance-and-publications/documents-and-publications/policy-guidance-document-library/national-best-practice-guidelines-for-the-ct-colon
- NHS bowel cancer screening (BCSP) programme and Society of Radiographers. The Established CTC Service Practitioner Framework - Recommendations for radiographer education, scope of practice and experience. SoR, London 2018. www.girsig.org.uk/trinity/wp-content/uploads/documents/pdfs/best-practice/3._final_ctc_service_practitioner_framework.pdf
- Royal College of Radiologists and College of Radiographers. Quality Standard for Imaging 2021. RCR, London 2021. www.rcr.ac.uk/sites/default/files/quality-standard-for-imaging-qsi.pdf

4. Post-imaging colorectal cancer cases should be analysed using the World Endoscopy Organisation framework.

Post-imaging CRC (PICRC) is defined by the World Endoscopy Organisation consensus as arising when a tumour has not been detected in a patient on CTC performed up to three years prior to their diagnosis. Assessment of PICRC is a fundamental quality assurance measure and learning opportunity for CTC services. Case identification for this evaluation is difficult with current systems and requires a manual assessment of data via the CRC multidisciplinary team (MDT) using published guidance. It is anticipated that PICRC evaluation will be incorporated into development of any future quality assessment dashboard.

- BSGAR/RCR. Standards of practice for computed tomography colonography (CTC). Joint guidance from the British Society of Gastrointestinal and Abdominal Radiology and The Royal College of Radiologists. RCR, London 2021. www.rcr.ac.uk/publication/standards-practice-computed-tomography-colonography-ctc-joint-guidance-british-society
- Rutter MD, Beintaris I, Valori R *et al*. World Endoscopy Organization consensus statements on post-colonoscopy and post-imaging colorectal cancer. *Gastroenterology* 2018 Sep; **155**(3): 909–925.e3.

Leadership

1. All trusts offering CTC services must have a named lead radiologist and lead radiographer accountable to the clinical director with responsibility for all aspects of service delivery and adherence to quality assurance standards.

The BCSP CTC service standards document requires one lead per BCSP centre; however, some centres include multiple separate trusts. Each symptomatic CTC service should have its own leadership and operational structure to ensure services are managed and developed appropriately.

While these roles may be delivered by the BCSP lead in a trust, the roles for leading symptomatic services should exist in each trust and should not be shared between trusts.

The lead radiologist and lead radiographer would be expected to provide leadership and coordination at all sites where the trust operates services in multiple locations.

2. Lead radiologists and lead radiographers should have allocated leadership time for service development, training, audit and quality assurance in addition to their clinical workload.

Trusts must allocate resources to ensure that CTC services are fit for purpose and quality assured against national standards. It is expected that the minimum time allocated per week for fulfilment of the lead radiologist duties would be one hour (0.25 PA) and for the lead radiographer two hours and clearly identified within an agreed job plan with scope to increase where additional work is identified through audit and quality systems. Leads will direct training and supervision of staff in light of outcomes from audit against national benchmarking standards.

Workforce

1. CTC services require radiologists, radiographers, administrative, pharmacy and medical physics professionals to provide quality-assured CTC services.

Radiographer, nursing, clinical support worker and assistant practitioner roles should be supported by specific scope of practice documents, and administrative roles should be supported by delegation logs to allocate responsibility for tasks related to service delivery.

A national CTC training and accreditation programme is being developed by radiologists and radiographers with funding from Health Education England and NHS England to support training and development of radiologists and radiographers. RCR/BSGAR and SoR documents have defined the training and experience for professionals delivering CTC services as follows:

- Radiographers performing CTC have defined levels of competency based on procedural skills experience and knowledge in addition to service governance, training and service development skills:
  - To reach ‘competent’ level 3 the radiographer must deliver >100 exams in total
  - To reach ‘proficient’ level 4 the radiographer must deliver >500 exams
  - To reach ‘expert’ level 5 the radiographer must deliver >750 exams
  - Finally a radiographer of any competency level must deliver >100 per year to maintain skills
- Radiologists reporting CTC:
  - Minimum standard for training: supervised interpretation of >175 validated cases

    Aspirational target: >300 cases
  - Minimum standard for workload: >100 cases interpreted per annum (rolling average over three years)

    Aspirational target: >175 cases

These recommendations are valid at the time of this publication but up-to-date recommendations should be consulted as guidance develops in the future. For all professional groups, the numbers indicated do not guarantee competence, proficiency or expertise. Quality education, audit and feedback are key determinants for developing the skills and knowledge to reach the required standards.

- BSGAR/RCR. Standards of practice for computed tomography colonography (CTC). Joint guidance from the British Society of Gastrointestinal and Abdominal Radiology and The Royal College of Radiologists. RCR, London 2021. www.rcr.ac.uk/publication/standards-practice-computed-tomography-colonography-ctc-joint-guidance-british-society
- NHS bowel cancer screening (BCSP) programme and Society of Radiographers. The Established CTC Service Practitioner Framework - Recommendations for radiographer education, scope of practice and experience. SoR, London 2018. www.girsig.org.uk/trinity/wp-content/uploads/documents/pdfs/best-practice/3._final_ctc_service_practitioner_framework.pdf

2. New or expanding CTC services should use a workforce calculator to determine future staffing requirements for sustainable quality-assured services.

A validated calculator has been developed by this group, in parallel to development of this pathway, which is based on representative NHS practice using analysis of CTC services in NHS trusts with a modified Delphi consensus methodology. This recognises that a range of service models operate across the NHS to perform the tasks required to deliver CTC depending on local variation in skills and staffing. The tool assists with calculations of the workforce-related costs associated with growth in CTC and will be published and hosted on the BSGAR website.

Other models and tools are available to aid workforce planning, and more are likely to be developed in the future.

- Society of Radiographers. Principles of safe staffing for radiography leaders. SoR, London 2018. www.sor.org/getmedia/14fcc38b-1496-41e0-b255-074660fa1fe5/principles_of_safe_staffing_for_radiography_leaders.pdf_2
- NHS Health Education England. HEE Star: Accelerating workforce redesign. www.hee.nhs.uk/our-work/hee-star [Accessed October 2022]
- NHSEI. Job planning the clinical workforce – allied health professionals. www.england.nhs.uk/wp-content/uploads/2021/05/ahps-job-planning-best-practice-guide-2019.pdf

3. Collaborative networks should be developed between trusts to share local expertise, training opportunities and delivery of services.

It is anticipated that imaging networks in England will coordinate service delivery in the future.

These networks should ensure future service planning to increase scanner capacity and staffing in addition to provision of integrated picture archiving and communication systems (PACs) and CTC interpretation software. These networks should also be responsible for implementing automated CTC quality assurance tools when these become available. The National CT Colonography Training and Accreditation Programme is also expected to have an increasing role in the supervision and delivery of training.

- NHS England. Transforming imaging services in England. www.england.nhs.uk/transforming-imaging-services-in-england/ [Accessed October 2022]

Infrastructure

1. A national cloud-based CTC quality assurance portal should be created to evaluate and improve CTC service performance that is integrated with national databases, regional radiology networks and local PACs.

Specific infrastructure investment must be targeted to develop quality assurance tools to evaluate adequacy of scan technique and interpretation compared with national standards.

Over time this will improve early detection of colon cancer and pre-cancerous polyps, minimise false-positive rates and unnecessary colonoscopy and minimise additional investigations for clinically insignificant findings. The increased confidence in standardised and quality-assured non-invasive colon exams has the potential to increase public participation in CRC health awareness programmes to deliver earlier diagnosis and improved outcomes.

This system will require integration with national NHS databases to determine the accuracy of CTC assessment against the final diagnosis.

A real-time dashboard will allow identification of service level and individual outliers at annual review for additional mentoring, support and training.

2. A national CTC training and accreditation programme for radiographers and radiologists should be commissioned to support and monitor training across the NHS.

This is considered an important component to deliver baseline training for specialist radiographers and radiologists and support ongoing professional development and competencies. Currently in the early phase of development, the programme will require long-term funding to support further development. An agreed means of assessing training and competencies will be needed to ensure that staff have the requisite skills and knowledge to deliver high-quality services.

3. A curated national cloud-based CTC case repository should be developed for training and accreditation in interpretation.

There is a need to expand the current workforce to meet increasing demands. Workforce expansion for all professional groups must be supported by appropriate national training resources. Specific infrastructure investment must be targeted to develop high-quality online and face-to-face training. This training is an essential component for raising standards. BSGAR/RCR will collaborate with other partners including NCTCTAP, HEE, NHSE and SCoR to create educational courses and resources for CTC by creating a case repository for training. This will include access to CT colonography interpretation software and allow self-assessment as well as mentored training to create a robust professional development resource for radiologists and radiographers.

4. CT scanner capacity must be increased to allow expansion of CTC services.

Investment is required for additional CT scanners with appropriate toileting and changing facilities, to allow an increase in CTC capacity in the NHS above current levels in order to meet the rising demand. It is well recognised that the NHS has lower access to CT scanners than most OECD countries, which will be a barrier to service development when demand for access to CT is growing for all indications.

Community diagnostic centres may create CT capacity to allow growth in CTC services and shorten pathways for patients. Delivery models are likely to vary based on governance, resources, population size and location of existing services. Potential opportunities for development, in addition to increasing capacity, could include creating one-stop assessment for patients with a possible diagnosis of cancer or an incomplete endoscopic evaluation.

- Organisation for Economic Cooperation and Development (OECD) iLibrary. Computed tomography (CT) scanners. www.oecd-ilibrary.org/social-issues-migration-health/computed-tomography-ct-scanners/indicator/english_bedece12-en [Accessed October 2022]

5. Regional networks should link to designated centres of excellence responsible for delivering CTC education and training.

A number of centres of excellence should be developed across the NHS to create the necessary hub support structures to deliver the high-quality staff training and mentorship needed in each region to support a national training curriculum in CTC. These centres will also provide the expertise to support and mentor services in need of improvement.

Abbreviations

ACPGBI – Association of Coloproctology of Great Britain and Ireland

BCSP – English Bowel Cancer Screening Programme

BSGAR – British Society of Gastrointestinal and Abdominal Radiology

CTC – CT colonography

CQC – Care Quality Commission

FIT – Faecal immunochemistry test

GIRSIG – Gastro Intestinal Radiographers Special Interest Group

HEE – Health Education England

NCTCTAP – National CT Colonography Training and Accreditation Programme

NHSE – National Health Service England

OECD – Organisation for Economic Co-operation and Development

RCR – The Royal College of Radiologists

SCoR – Society and College of Radiographers

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