

# Recommendations for cross-sectional imaging in cancer management, Second edition

Preface

Faculty of Clinical Radiology

## Preface

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The number of people being diagnosed with cancer each year in Britain has risen by 50,000 over the past decade from around 283,000 cases in 2001 to 331,487 in 2011.<sup>1</sup> Significant improvements in survival have been achieved as prevention, diagnosis and treatment have improved. In the 1970s, less than a quarter (23%) of cancer patients survived for ten years. By 2007, that was closer to a half (46%).<sup>2</sup>

As a result, there has been a considerable increase in the number of patients living with cancer, currently estimated to be more than 2 million in the UK.<sup>3</sup>

Despite recent improvements in cancer care, survival rates in England are still lagging behind other countries. The late diagnosis of cancer is seen as the key reason for this. In 2011, *Improving outcomes: a strategy for cancer*<sup>4</sup> was published with the ambition to drive up cancer survival rates in England so that by 2014–15 an extra 5,000 lives can be saved every year; £450 million of the £750 million allocated over four years to help achieve this aim will be used to improve early diagnosis. It is now clearly established that imaging is central to the management of patients with cancer throughout the patient pathway and will play a key role in supporting this target.

The introduction of cancer targets<sup>5,6</sup> in England provided the impetus for up-to-date national cancer imaging guidance, resulting in the publication of the first edition of our guidance in 2006, which has now been withdrawn.

There is still a need to provide guidelines and protocols for computed tomography (CT), magnetic resonance imaging (MRI) in cancer with the objective of helping to achieve a high-quality, efficient and uniform cancer imaging service across the UK. A major advantage of adopting UK-wide protocols is the ability to provide a streamlined effective service in which appropriate scans are undertaken according to the patient's tumour type and purpose of the examination. These protocols will also ensure that imaging studies can be compared more accurately during follow-up in an individual patient, irrespective of

where the patient has been imaged. This is particularly important for reducing the need to repeat imaging of patients being entered into clinical trials.

CT and MRI are used at all stages of the patient pathway: diagnosis, staging, determining the appropriate therapy, including eligibility to enter into clinical trials, and during follow-up. Cross-sectional imaging is also used for the assessment of residual disease and for determining the presence and extent of tumour relapse. These key roles were recognised by previous editions of this manual, but guidelines and protocols need to be continually appraised and updated to keep abreast of technological advances and new therapeutic approaches so that optimum results can be achieved.

The current edition brings CT, MRI and PET together within the same document, reflecting the current clinical practice of these complementary techniques. At different points along the patient pathway one or other may be more appropriately used depending upon whether treatment intent is curative or palliative, and whether the imaging focus is for local or metastatic disease. Ultrasound, which has a major role in cancer management, has not been included.

These guidelines are intended to provide practical advice and recommendations which should be achievable for the majority of patients. However, they are not intended to be prescriptive and could be adapted readily to meet local requirements.

We have not included information on image interpretation which can be found in many excellent textbooks, journals and internet resources. We have tried to follow as closely as possible a standardised page layout, including reference to the TNM classification of tumours, where appropriate.

The Royal College of Radiologists has brought together a panel of nationally and internationally recognised radiologists with particular expertise in cancer imaging to produce these recommendations. All the contributors work in

busy radiology departments within the NHS with a large cancer patient referral base. I would like to thank all those who have contributed to the document for their hard work and dedication.

We hope that these protocols will be used widely within departments of radiology undertaking cancer imaging and will help to improve cancer services across the UK.

The guidelines will only be made available electronically in order to ensure that they remain up to date with current practice and are being published section by section.

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## References

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## Acknowledgements

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