



Improving Quality

NHS Improving Quality working in partnership with NHS England

Challenges and improvements in diagnostic services across seven days

Foreword

Across the country, hospitals and primary and community care organisations are working together to look at ways of delivering safe and effective care over seven days a week. This helps address the link between poorer outcomes for patients and the reduced levels of service provision at the weekend.

Diagnostic and scientific services underpin all models of care irrespective of settings and most clinical pathways. Nationally, the seven day service forum, led by Sir Bruce Keogh, Medical Director for NHS England, has set out a plan to drive seven day services across England in the next three years¹, as part of a transformational improvement programme. For this plan to be successful diagnostic and scientific services must be at the centre of service transformation. There are therefore huge opportunities for these services to contribute to delivery of this plan and to improve patient experience and outcomes.

Previous publications by NHS Improving Quality, *Equality for all: delivering safe care seven days a week*, and more recently, *NHS Services open seven days a week: every day counts*, provide practical examples of how diagnostic and scientific services have started to design and deliver services to give patients care and treatment seven days a week.

This new publication summarises service improvement achievements and potential challenges. Whilst significant progress has been made we need to strive to find new and innovative solutions that are both clinically and financially sustainable to change delivery of diagnostic and scientific services to meet the needs of service users.

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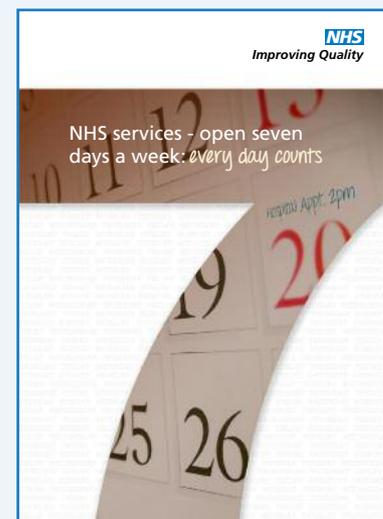
¹NHS Services, Seven Days a Week Forum. Summary of initial findings. NHS England, December 2013.
www.england.nhs.uk/2013/12/15/sir-bruce-keogh-7ds

Radiology services

Since the publication of *Implementing Seven Day Working in Imaging Departments: Good Practice Guidance* (DH 2011), and in response to changes in the care pathways for specific diseases, radiology departments have developed local strategies to deliver timely diagnostic imaging to patients. For example, in acute care, patients with suspected acute stroke now receive an immediate clinical assessment, including a brain scan within 60 minutes of request and clinical interpretation which determines the treatment pathway. Rapid access to scanning facilities in trauma centres and acute emergency departments has significantly improved.

The development of Heart Attack Centres has also changed working practices for radiology departments, who have developed on call radiography services to cover the cardiac catheter laboratories for emergency primary percutaneous intervention (PPCI) across England.

Whilst significant progress has been made in these areas, and most radiology services deliver some routine outpatient services for part of the weekend, there are only a limited number of service models offering general radiology, CT, MRI and ultrasound on site seven days a week. More information is available at: www.nhsiq.nhs.uk/8813.aspx



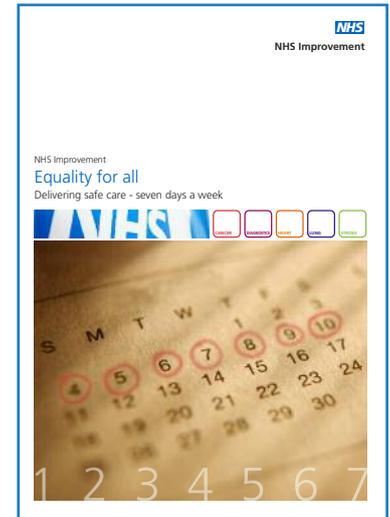
Interventional radiology

Interventional radiology (IR) intervention can prevent death from sepsis by draining abscesses, prevent rupture of aneurysms by a variety of techniques and save limbs by reperfusion techniques. IR embolisation procedures can also be life saving for patients with post partum bleeding, haemorrhage after trauma and gastrointestinal bleeding.

A baseline survey of acute trusts (NHS Improvement, 2011/12), identified variation in IR service provision across England. Interventional radiology departments, were asked to self-assess their service provision based on whether a formal on-call consultant rota and agreed formal pathway of care were in place. Improvement work resulted in an increase in the extent of 24/7 provision across England.

Case studies of how organisations have overcome challenges in 'Towards best practice in Interventional Radiology' NHS Improvement (June 2012) and 'Equity for All' can be viewed here at: www.nhsiq.nhs.uk/8796.aspx

IR interventions are usually, but not exclusively, performed as an emergency/urgent intervention. Nephrostomy is a core service to which patients require access to on a seven days basis. A map of variation in nephrostomy out of hours and in hours services can be seen at: www.nhsiq.nhs.uk/8796.aspx



Endoscopy services

“Average GI bleeding mortality rate is reduced by 10% by having access to 24/7 endoscopy, interventional radiology and surgery working together as a multidisciplinary team.”

Erika Denton, National Clinical Director for Diagnostics

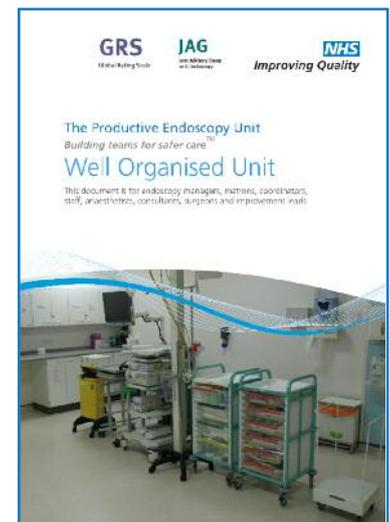
There is wide variation in the access and provision of out of hours service for patients requiring emergency endoscopy for upper gastrointestinal bleeding. The NICE guidance for managing patients presenting with Acute Upper Gastrointestinal Bleeding (AUGIB) was published in 2012. This guidance specifies that there should be access to endoscopy for all unstable patients with severe bleeding immediately after resuscitation and for all other patients within 24 hours of admission. In addition, larger units managing more than 330 cases a year, should provide daily endoscopy lists.

A recent British Society for Gastroenterology survey of 153 endoscopy units, identified that 60% of units achieved this core service provision or had a formal network pathway to an agreed recipient Trust. Since March 2013, the British Society for Gastroenterology (BSG) working with NHS Improving Quality have been gathering evidence on models of 24/7 out of hours service provision that could be developed across England.

With unprecedented increasing demand on elective endoscopy services due, in part, to the expansion of the bowel cancer screening programme, it has been essential for clinical teams to ensure that their overall service is as efficient and productive as possible.

NHS Improving Quality has undertaken two pieces of work on efficient use of resources across the week: both are available at: www.nhsiq.nhs.uk/7923.aspx.

The 'Productive Endoscopy Unit' toolkit, developed in conjunction with professional bodies, will support all endoscopy services to work towards a seven day service, increase productivity, improve safety and support earlier diagnosis.

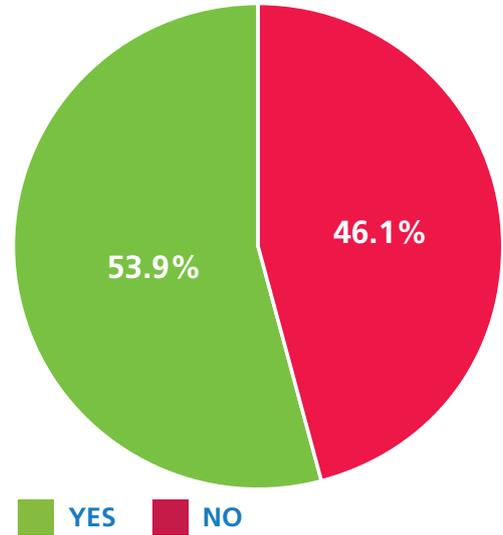


Healthcare Scientist survey of seven day service provision

NHS Improving Quality conducted an online survey of healthcare scientist service provision across England in 2013. 365 healthcare scientists completed the survey. Key findings included:

- Majority of staff believe they should offer services seven days a week
- Less than 50% of departments consult with service users regarding the need for services seven day a week
- 50% of services had expanded services across seven days, using predominantly on-call systems for specific diagnostic tests rather than whole department service provision
- Key drivers for expanding service delivery included urgent and emergency care demand, elective work demand and to manage waiting times
- Pathology – 17% of organisations surveyed offered a full spectrum of service over 24/7
- Radiology - limited number of service models delivering on site general radiology, CT and MRI seven days a week
- Cardiac physiology – minimal evidence of 'whole department' provision of seven day service.

Have you asked service users if your model of provision successfully meets their needs?



Pathology service provision

Pathology services underpin over 80% of all diagnoses in all care settings and are an integral part of most clinical pathways and clinical guidelines. There is however, significant variation in provision of pathology services across the week in terms of location, specialism and test availability.

Most pathology laboratories provide routine services such as biochemistry and haematology over a seven day period, but others such as histopathology operate a traditional five day working week in most organisations.

The recent Healthcare Science survey (2013) identified however that only 17% of organisations surveyed offer a full spectrum of service over 24/7. There is a risk to sustainability to all services because one third were using an on call service. Half were providing it on a shift basis predominantly in haematology, biochemistry and microbiology, mainly to meet clinical demand and urgent and emergency care. The main barriers reported to delivering seven day services were financial restrictions and staff rota preferences.



Pathology services, drawing upon evidence from both within England via NHS Improving Quality, and the UK, as well other countries around the world, should use this opportunity to develop robust, affordable and sustainable models of seven day service provision across all specialisms to improve patient outcomes and patient experience.

Physiology services

There is significant variation in the provision and access to many physiology diagnostics and services across the eight clinical specialties (audiology, cardiac, gastrointestinal, respiratory and sleep, neurophysiology, vascular, vision, urodynamic). This is despite many of these diagnostic tests being an integral part of NICE clinical guidelines and to improving outcomes.

The provision of services outside of the traditional working week is very limited apart from in certain areas and for a small number of tests. Most models of seven day service provision are predominantly to provide 'out of hours', and Saturday and Sunday cover via an 'on call' service, rather than a shift based model to provide full seven day provision.

This in part reflects as illustrated in the healthcare science survey a lack of engagement with and requests by service users. However, there are huge opportunities to dramatically improve outcomes for and the experience of patients by offering services over a seven day working week that should not be overlooked. Ongoing work with NHS Improving Quality will be further scoping some of the issues in priority areas.



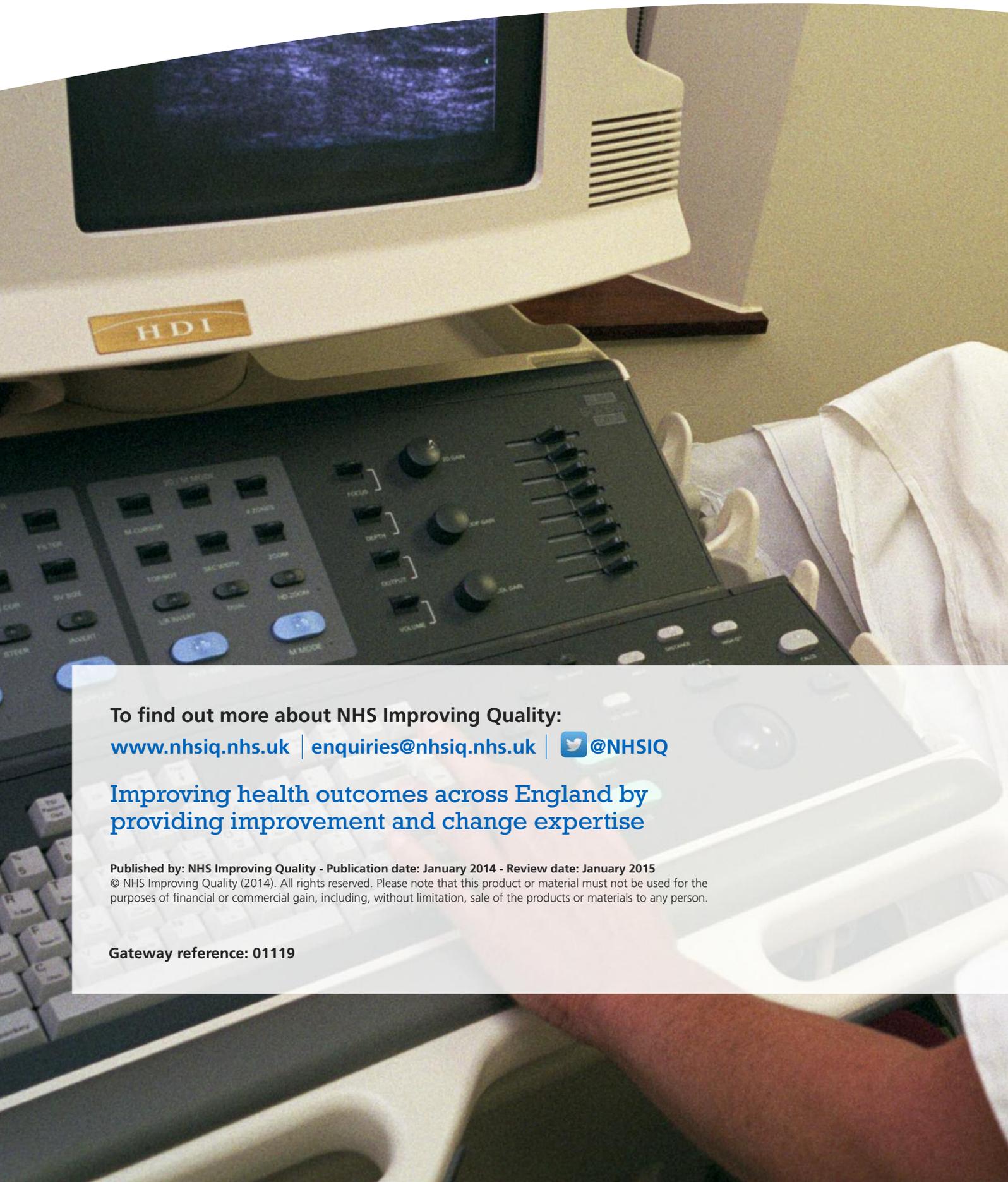
Cardiac physiological diagnostics are fundamental to emergency and acute care and to delivering improved cardiovascular outcomes. There is already, for example, on call cardiac physiology support for catheter laboratories and for primary cardiac angioplasty and other emergency interventions. However for other tests such as echocardiography there is limited provision outside of the traditional working week.

From the recent healthcare scientific survey, 92.3% of respondents, in 40 cardiac physiology departments, believe they should be delivering services seven days a week, however there was minimal evidence of 'whole department' cardiac physiology service provision. Full results can be seen at: www.nhsiq.nhs.uk/diagnostics

The British Cardiovascular Society, in conjunction with other specialist bodies and with NHS Improving Quality, is currently working on a report commissioned by the Chief Scientific Officer and the NCD for cardiovascular disease, to make recommendations on sustainable and affordable models of cardiac physiology scientific services to meet future demands including for seven day service provision.

References:

- Equity for all: Delivering safe care, seven days a week (NHS Improvement, 2012)
- Implementing seven day working in imaging: Good Practice Guidance (Department of Health, 2011)
- NHS services - open seven days a week: everyday counts (NHS Improving Quality, 2013)
- Towards best practice in interventional radiology (NHS Improvement, 2012)



To find out more about NHS Improving Quality:

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