



Workforce innovation delivers “prompt, efficient, cost effective and safe clinical imaging services”

*Steve Herring, President,
Society & College of Radiographers*

Andy Rogers, President, British Institute of Radiology

Diagnostic imaging services are faced with a dichotomy.

On the one hand demand and expectations are growing exponentially and will continue to do so with a growing and ageing population. On the other side workforce recruitment and development issues leave many departments finding it increasingly challenging to provide a “Prompt, efficient, cost-effective and, above all, safe clinical imaging service”¹ that meets the needs of patients.

Increases in numbers of radiologists and radiographers in training are urgently required but innovation is required immediately.

Since the publication of the joint document *Team working in clinical imaging*¹ by the Royal College of Radiologists and the College of Radiographers in 2012, team working strategies are increasingly fundamental to the delivery of a patient focused service.

This is leading consultant radiologists and advanced and consultant practitioner radiographers to explore new ways of working safely and effectively to help reduce unacceptable waits for investigations to be reported.

New care models and improved cancer outcomes require novel approaches, maximising the skills of the entire imaging team. The status quo is no longer an option.

Six NHS trusts in south Yorkshire have announced the UK's first reporting radiographer academy will accept trainees from September. Dr Des Breen, medical director for the Working Together Partnership Vanguard said, “We are putting ourselves at the forefront of this approach. Not only does the academy help solve a future workforce issue, it also develops our existing workforce, which we are confident will help with staff retention.”

There are always sceptics when professional boundaries are blurred and new ways of working are introduced. Drs Peter Cavanagh and Sue Kearney, both radiologists, provide their perspectives over the page.

Many in radiology and radiography instinctively appreciate that multidisciplinary team working is critical for the “timely production and accurate interpretation of imaging examinations.”¹

Evidence gathered from early adopters of multidisciplinary team approaches to reporting in clinical areas such as musculoskeletal trauma, gastrointestinal imaging, breast screening and ultrasound, have changed the views of others.

An example is the collaborative approach taken by the radiology department at Homerton University Hospital, an acute London trust². A continuous service evaluation, using activity benchmarked against the Royal College of Radiologists' workforce planning and national reporting standards, says that:

- Total activity has increased 35% from 117,520 examinations in 2010-11 to 158,773 in 2015-16. This has been driven by sustained growth in cross-sectional imaging. Over the six year cycle: MRI has increased 72% (5,814 to 9,754 in 2015-16); CT 26% (11,636 to 14,754); Non-obstetric ultrasound 41% (23,057 to 32,719).
- Average waiting times have remained relatively consistent, especially given the increase in demand
- Reporting turnaround times have been maintained, or improved
- Homerton is one of a few departments in England to report zero wait in the Royal College of Radiologists' audits
- Aside from overnight cover for urgent CT scans, outsourcing has not been required to maintain capacity or reporting times
- The consultant radiologist and radiographer advanced practice establishment has increased, shaped by anticipated demand and service requirements
- Advanced and consultant practitioners, reporting radiographers, sonographers and physiotherapists have provided a significant contribution to the service delivery.

With growing evidence and activity in this area both the SCoR and the BIR believe that radiographer reporting, **following the principles of the team-working guidance**¹ is a vital, current part of service delivery.

We hope that further research is undertaken to elucidate its future role and that an objective approach is taken to its further implementation.

Published by:

INHEALTH | RADIOGRAPHER REPORTING

BIR
The British
Institute of
Radiology

CoR
THE COLLEGE OF
RADIOGRAPHERS

It's OK to be sceptical



*Dr Peter Cavanagh, Consultant Radiologist
Taunton & Somerset NHS Foundation Trust*

If someone had told me at the start of my career in radiology that when I retired there would be no more barium enemas, myelograms, IVUs and film would be replaced by digital images, I would have been extremely sceptical. Although I have always been keen to embrace change that improves healthcare, where was the evidence that other techniques were better?

However, as we all know the evidence came along and, as radiologists and radiographers, we embraced these changes by developing new skills and ways of working. The result is definite improvement in the quality of service we provide. That is the excitement of being in a speciality that is at the cutting edge of scientific development.

Our goal has to be to improve the quality of care for patients within the finances available to us and we need to look at this in terms of the whole service we provide and the total population we serve, rather than at the individual transaction.

The key to this is thinking differently, moving away from who currently does the work, towards asking "what are the tasks that need doing?", "what skills and competencies are needed to do these tasks?" and, finally, "who potentially could gain these competencies and skills?"

In asking this last question it is OK to be sceptical. It is perfectly valid to ask where the evidence is that change is going to lead improvement. So, I would encourage you to seek out the evidence and review it.

The first evidence is that the current workforce in its current configuration is struggling to deliver the high standards of care it would aspire to, leading to unacceptable delays in many areas of the country and widespread stories of financial overspend based on the need for sticking plaster solutions of outsourcing and locum overtime payments.

We know from our experience in ultrasound and breast screening that radiographers can make the transition from the traditional role of image acquisition, to a role in image interpretation. In these two services this is no longer the exception but it is the way the services are provided. We also know that where radiographers are trained and supported, they can carry out a valuable role in reporting plain x-rays, freeing up radiologists for more complex image interpretation. There are further case studies where highly trained radiographers play a role in reporting of specific cases in MRI and CT.

The evidence does not stop there. If radiographers are going to take on new roles, they will need to let go of other tasks they have traditionally carried out. There is good evidence that radiographer assistants, if trained properly, can develop appropriate competencies in such tasks as cannulation, patient preparation and acquisition of some plain x-rays.

I firmly believe the future of our specialty will be one of further massive change and development and, as a workforce, we need to work together to ensure that our skills and competencies are developed and used appropriately in the service of better healthcare for our patients.



There are valid objections, but they should not preclude radiographer reporting



*Dr Sue Kearney, Consultant Cardiothoracic Radiologist,
Lancashire Teaching Hospital Trust*

Trusts across the UK already employ radiographers to report peripheral plain films, and in some departments, chest x-rays.

Those who advocate expanded radiographer reporting, point out that reporting capacity could be expanded relatively rapidly and cite the sustainability of reporting sessions that can be ring-fenced, permitting easier management of workflow.

However, the Royal College of Radiologists has not embraced an extended role for radiographers. A principle objection has been the different training context of medical and radiographer staff, and a concern therefore that radiographer reports may not provide the same interpretive standard as those of radiologists.

There is also a concern that fragmentation of chest imaging services may result in a disconnection between CXR and other imaging, and a significant training commitment for already stretched departments.

All these objections are valid, but they should not preclude radiographer reporting.

Radiologists and radiographers agree that to provide a clinically relevant interpretation of complex CXRs requires both significant training and clinical experience.

However, radiographers who are experienced at reviewing CXRs frequently have good skills at detecting abnormality that are complimentary to the interpretive skills of radiologists.

Furthermore, most CXRs are not complex and many do not require an interpretive report. There is no evidence to suggest radiographers do not provide accurate reports: limited studies have suggested comparable reporting accuracy between radiologists and radiographers.

While too few and small in number to support a change in practice, reporting radiographers should serve as a basis for further comparison that may allow us to understand the strengths and limitations of each group.

A joint reporting model could be envisaged in which radiologists and radiographers work together to provide an excellent CXR reporting service. This could resemble the successful model used in hematology laboratories across the UK where laboratory staff initially review and report blood films, before referring complex, uncertain or significant cases for clinical review.

Such a model would maintain the stake of radiologists in the training and skills of the CXR reporting service, while radiographer skills would be recognised, valued and expanded.

This is not a cheap or immediate fix, and must be supported by assessment structures that support, evidence, and enhance skills, but ultimately would benefit radiographers, radiologists and patients.