

BY FLORIAN DEMUTH

ESR concept paper on value-based radiology

The ESR published a concept paper on value-based radiology on August 30, 2017. Prepared by the ESR Value-Based Imaging Working Group (VBI WG), led by its chair and current ESR 1st Vice-President Prof. Lorenzo Derchi, the paper sets out the society's position on value-based trends in healthcare in general, and radiology in particular.

The VBI WG was established in August 2016 and tasked by the ESR's Board of Directors with leading the ESR's response to trends within healthcare that increasingly emphasise value-based aspects in relation to quality of care, patient safety and reimbursement systems. Within radiology, the issue of volume-based vs. value-based practice has been debated for a number of years and, with this paper, the ESR is making an important contribution to this discussion.

The ESR sees value-based radiology as an emerging paradigm that complements and enhances its existing approach to quality and safety, while focusing on what actually matters most to professionals, patients and payers. The central

questions of value-based radiology are: What has the greatest impact? and How do we develop metrics to demonstrate this impact?

Value-based healthcare concepts focus on 'outcomes' as the cornerstone for evaluating healthcare

processes, cost-effectiveness and healthcare professionals' performance. What has been lacking so far is the inclusion of the diagnostic process, which constitutes the integral first part of any care cycle. The ESR argues that the diagno-

sis should be recognised as the first 'outcome'.

Having established a radiologist's diagnosis as an outcome, the paper goes on to illustrate radiology's multifaceted value, and to introduce a number of metrics that can be developed based on this premise.

The discussion on value-based radiology is just starting and the ESR hopes that radiologists in Europe will actively engage in this debate to keep our profession at the forefront of healthcare in the

21st century. The ESR, the Radiological Society of North America (RSNA), the American College of Radiology (ACR), the Canadian Association of Radiologists (CAR), and the International Society for Strategic Studies in Radiology (IS3R) are in discussions to draft a joint paper which will position value-based radiology within the wider value-based healthcare concept.

Professional Issues and Economics in Radiology (PIER) Sessions

Friday, March 2, 16:00–17:30, Room M 2
PIER 3 Value-based radiology

Moderators: P. Mildenberger, Mainz/DE
G. McGinty, New York, NY/US

- » Basic concepts of value-based radiology: U.S. perspective
J.A. Brink; Boston, MA/US
- » Basic concepts of value-based radiology: European perspective
L. Donoso; Barcelona/ES
- » New metrics are required for value-based radiology
G. McGinty; New York, NY/US
- » Panel discussion: A European-U.S. debate on the value of 'value-based radiology'
J.A. Brink; Boston, MA/US
L. Donoso; Barcelona/ES
G. McGinty; New York, NY/US
L.E. Derchi; Genoa/IT
E.J. Adam; London/UK

Coffee & Talk Session

Saturday, March 3, 14:00–15:00, Coffee & Talk
C 9 From volume-based to value-based radiology

- » Chairperson's introduction
L.E. Derchi; Genoa/IT
- » What is 'value' in radiology and how can it be measured?
A. Brady; Cork/IE
- » What really matters to patients
J. Birch; Poole/UK
- » What is value from an industry perspective?
N. Denjoy; Brussels/BE
- » Open forum discussion

BY BARRY KELLY, JANE ADAM, ADRIAN BRADY

The European Society of Radiology's clinical audit tool

Audit simply means comparing an element of clinical practice against an agreed upon standard. In radiological practice this might mean what we do, how we do it, what equipment we use, or how we interact with our patients, our colleagues and our environment. Therefore, the question we answer by conducting audit is: are we safe?

Audit should be Achievable, Local, Practical, Inexpensive, Non-threatening, and Easy (ALPINE).

Audit uses specific methodology in which a given performance is compared with a preselected standard. If the standard is not achieved, the reasons for this are explored, change is implemented and a re-audit is carried out to ensure improvement. This methodology is often described as the audit cycle.

The EU Basic Safety Standards (BSS) Directive (Council Directive 2013/59/EURATOM) must be transposed into national law by February 2018. This has major implications for European radiology practice in several areas, including documented justification processes for radiation exposure and dose optimisation. In addition, it requires that 'clinical audits are carried out in accordance with national procedures', meaning that clinical audit will be mandatory (article 58 (e)).

The European Commission published Guidelines for Clinical Audit in 2009, and these were summarised in a statement from the ESR in 2011. These guidelines and the statement could be considered the basis for internal clinical audit. Although there will be variation in how the requirements for clinical audit will be implemented across Europe, an internal assessment within units or departments that uses standard audit methodology is recommended as a systematic and continuing activity with a significant annual output of departmental audit data.

Internal clinical audit should be in conjunction with external clinical audit (which may be required by national legislation) whereby an external auditing body or auditors visit departments every five years. Regardless of the national variation within the new legal framework, internal clinical audit will help depart-

ments to comply with legislation, to monitor their own practice and to be well prepared for any external audit.

The ESR has both professional and educational perspectives. It cooperates with institutions including the European Commission and the Heads of the European Radiation Competent Authorities (HERCA) to ensure that clinical audit is applied properly to improve quality of patient care in Europe, and is in line with the regulators' perspective regarding audit.

Radiologists' experience of clinical audit across Europe, however, is variable. In response to this variability, the ESR Audit and Standards Subcommittee together with EuroSafe Imaging undertook a pilot project in 2017. Concentrating on the key areas of radiation protection and patient safety, 17 key audit topics were described and suggested versions of completed templates were produced for each topic. The ESR Audit and Standards Subcommittee and EuroSafe Imaging are promoting the audit initiative, which also supports the implementation of action no 2 of the 'EuroSafe Imaging Call for Action'.

This project was designed, firstly, to increase awareness of clinical audit among radiologists and to help them make it part of their routine departmental work. In addition, participation in the project can help demonstrate to external bodies that radiology departments offer safe, well-documented care.

Five-star EuroSafe Imaging departments were invited to participate in the pilot. Each participating department was asked to complete five key audits that were considered key by the Audit and Standards Subcommittee. Prof. Peter Mildenberger from the University Medical Center Mainz in Germany, a pilot participant, highlighted the

relevance of topics and the audit tool in general.

"For us as radiologists, the focus on clinically relevant topics such as patient safety, internal processes and general radiation protection aspects is of particular interest and significance. This makes the ESR clinical audit tool clearly different from and more valuable than many other certification initiatives in healthcare," Mildenberger said.

The pilot participants were invited to comment on the template itself in particular and the ease of the process in general. This pilot study took place during the summer and autumn of 2017.

The results of the pilot indicated that the process was considered non-time consuming and straightforward and that the templates themselves were lucid and easy to use. Dr. Laura Oleaga from the Hospital Clinic Barcelona, Spain, who participated in the pilot put it in a nutshell: "The audit tool proposed by the ESR is easily completed. It can be utilised to enhance the status of your department and can help to measure the practice's standards and improve patient's care and outcome. It serves as a quality maintenance policy of the department."

Subsequently it has been agreed that the 17 templates and topics will be made available to all radiology departments in European Union member states, along with the explanatory booklet (Esperanto) which takes the reader step-by-step through the process of completing any clinical audit.

We in the ESR Audit and Standards Subcommittee believe that this audit tool will encourage a culture of regular self-audit and self-improvement.

Audit in general, and the pilot project in particular, will be discussed in greater detail in the Coffee & Talk Room on the 1st level today at 12:00, and at the ESR Audit

Session in Room M 1 on Saturday, March 3, at 16:00.

Dr. Jane Adam has a longstanding interest in audit and standards in radiology, and is former chair of both the Royal College of Radiologists Audit and Standards committees, and the ESR Quality, Safety and Standards Committee. Dr. Adrian Brady is a Consultant Radiologist in The Mercy

University Hospital, Cork, Ireland, a former Dean of the Faculty of Radiologists, Royal College of Surgeons in Ireland, and Chair of the ESR Quality, Safety & Standards Committee.

Dr. Barry Kelly is the Chairman of the ESR Audit and Standards Subcommittee. He is a cross-sectional radiologist with a special interest in trauma imaging and imaging of the ICU patient.

Coffee & Talk Session

Friday, March 2, 12:00–12:45, Coffee & Talk
C 6 ESR audit pilot project

- » Chairperson's introduction
E.J. Adam; London/UK
- » ESR audit pack
B.E. Kelly; Belfast/UK
- » Pilot project among EuroSafe Imaging Stars
L. Bonomo; Rome/IT
- » Open forum discussion

ESR Audit and Standards Session

Saturday, March 3, 16:00–17:30, Room M 1
Audit across Europe: directive and perspective

- » Chairpersons' introduction
A. Brady; Cork/IE
D.C. Howlett; Eastbourne/UK
- » The Esperanto Audit Project: results from the pilot project and roll out
B.E. Kelly; Belfast/UK
- » Engaging in the pilot: The EuroSafe Imaging Star perspective
G. Paulo; Coimbra/PT
- » Quality improvement and change management: audit in industry
S. Lee; Guildford/UK
- » HERCA and audit: inspection vs clinical audit. What's the difference?
S. Ebdon-Jackson; Didcot/UK
- » Panel discussion: Does audit make the patient journey safer?

These sessions are part of the EuroSafe Imaging campaign

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