

Aims and Benefits of Audit by Specialty: Radiology

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Chairman of the ESR Board of Directors

ESR focus on quality and safety

- Quality and safety in radiology high up on ESR's agenda ever since, following a holistic multi-professional approach
- The ESR Quality, Safety and Standards Committee embodies this principle through its five subcommittees
 - Audit and Standards
 - eHealth and Informatics
 - Radiation Protection
 - Referral Guidelines
 - Ultrasound

ESR focus on quality and safety

- ESR works with other health stakeholders and maintains close relations with related disciplines (radiographers, medical physicists etc.), European regulators (HERCA, EMA etc.), the European institutions as well as with international organisations (IAEA, WHO)
- ESR has initiated or participated in a number of quality and safety initiatives and projects at European level

- EuroSafe Imaging
- ESR iGuide
- PiDRL
- MEDIRAD
- EURAMED etc.



ESR Audits and Standards Subcommittee

Chairperson

David Howlett

Quality, Safety and Standards Committee Chairperson

Núria Bargalló Alabart

National Societies Committee Chairperson

Andrea Rockall

Education Committee Chairperson

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Members

Alexandra Karoussou-Schreiner
Steve Ebdon-Jackson
Dominique-Gérard Carrié
Mika Kortensniemi
Vasilis Syrgiamiotis (EFRS)

Co-opted members

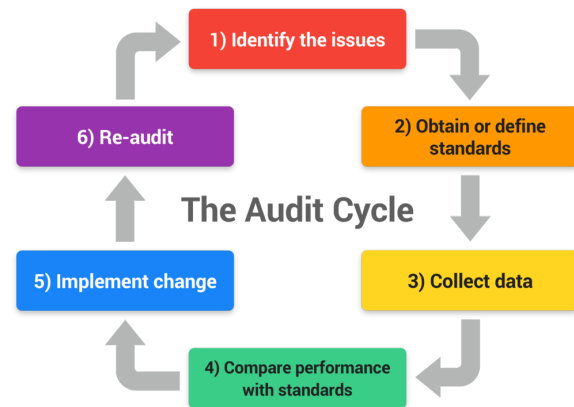
Gordana Ivanac
Luke Sonoda

Goals of the Subcommittee

- To explain the value of audit for the maintenance and improvement of radiological care and to stimulate spreading of the methods.
- To develop advisory documents on how to undertake audit in radiology and to provide examples of good audits.
- To promote cross European cooperation in undertaking clinical audits.
- To advise and organise education initiatives on audit for ESR individual and institutional members as appropriate.
- To be aware of national audit programmes and to liaise with national leaders of these programmes on behalf of the ESR.
- To explain and promote the importance of quality standards for radiological care.
- To develop evidence based structure and methodology for ESR standards.
- To collate and review existing standards in radiology from institutional members.
- To develop standards for process and organisation in radiology.
- To develop standards of performance that have a measurable outcome.

ESR perspective on clinical audit

- Clinical audit is a well proven tool for quality improvement
- Not to be mixed up with regulatory inspection
- Clinical audit allows to check how our departments are performing and how well and safely we are looking after our patients.
- Clinical audit allows us to check on how we are compliant to existing good practice.
- Clinical audit gives us information as to where improvements should be made.



The ESR Clinical Audit booklet Esperanto 2019

- Produced by the ESR Audit and Standards Subcommittee
- First published in 2017 and designed to increase awareness and understanding of clinical audit within radiology departments across Europe and to support them to establish and/or develop an internal clinical audit programme
- Aim: to facilitate improvements in patient experience, care and outcomes and help radiology depts to comply with the European Basic Safety Standards Directive
- An enhanced version was developed under the guidance of Adrian Brady and David Howlett in 2019. It contains an expanded audit guide with an additional focus on the legal requirements around audit, and an increase in audit templates.

Esperanto

ESR Guide to Clinical
Audit in Radiology
and the ESR Clinical
Audit Tool

The ESR Clinical Audit booklet Esperanto 2019

- Strong emphasis on compulsory and legally required audit (regulatory) relating to the regulation of medical exposures involving ionising radiation.
- Also covers (non-regulatory) clinical audit processes involved in service provision and clinical practice.
- A series of example audit templates is included to facilitate local departmental participation in audit.
- Information on how audit activity may occur within a radiology department: internal audit at departmental level, external audit (eg by a national society) or internal audit with external direction.

The ESR Clinical Audit booklet

Esperanto 2019

Regular audit topics

- 1) Is there a departmental mechanism for providing patients (or their representative) with information relating to the risks/benefits associated with radiation dose from the medical exposure?
- 2) Is there an established mechanism within the department to register and analyse accidental /unintended exposures?
- 3) Is there a departmental policy for informing patients, or their representative, that they have undergone an accidental exposure?
- 4) Is there a mechanism for record keeping and retrospective analysis of accidental or unintended medical exposures?
- 5) Is there a mechanism for referring accidental exposure events to the medical physics expert (MPE) and informing the competent authority of significant events?
- 6) Does the department utilise criteria, provided by the relevant radiation protection competent authority, for what constitutes an accidental or unintended significant exposure?

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- 7) Is there evidence for appropriate training for individuals with delegated responsibility (in the case of non-radiologists) for the justification process?
- 8) Is there a departmental mechanism to confirm and document the non-pregnancy status of individuals undergoing medical exposures?
- 9) Is there a written protocol for the identification of who is responsible for the justification process?
- 10) For radiation exposure related to health screening by invitation on asymptomatic individuals, is there a local policy affirming justification by a competent authority?
- 11) What percentage of examinations involving ionising radiation are justified in advance of being performed?
- 12) What mechanism exists on the request form for contacting referrers to permit pre-exposure justification discussions to occur if necessary?
- 13) Is there a written protocol for who may be responsible for justification of X-ray/fluoroscopic/ interventional ionising radiological procedures?

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- 14) Is there a written protocol for who may be responsible for justification of CT examinations?
- 15) What mechanism is used to evaluate patient dose in high-dose procedures?
- 16) What percentage of radiodiagnostic procedures have established diagnostic reference levels (DRL)?
- 17) Specific technical requirements for equipment in use for medical exposures.
- 18) Eye lens dose limits for occupational exposure.
- 19) Initial education and training in radiation protection.
- 20) Audit of education plus training in radiation protection, doses and side effects.
- 21) Provision of clinical information to support justification.
- 22) Staff dosimetry audit – this includes a draft adapted questionnaire.
- 23) Evaluation of the role and responsibilities of the medical physics expert.

The ESR Clinical Audit booklet Esperanto 2019

Clinical audit topics

- 1) Does the radiology department record statistics about patient satisfaction?
- 2) Waiting time for outpatient ultrasound appointments
- 3) Protocols around radiological procedures, information in reports
- 4) The practice of “routine” preoperative chest x-ray
- 5) Audit of inpatient chest x-rays or abdominal x-rays
- 6) What percentage of non-Ionising imaging studies (MR/Ultrasound) are consistent with the referral guidelines?
- 7) Pain sensation during image-guided interventions

ESR survey on the Current Status of Uptake of BSSD Requirements (focus on audit) – 2018/2019

“The Current Status of Uptake of European BSS Directive (2013/59/Euratom) Requirements – Results of a Pilot Survey in European Radiology Departments with a Focus on Clinical Audit”

- Paper published in May 2019 in *Insights into Imaging*
- Survey among ESR EuroSafe Imaging Star department network to assess compliance with selected key BSSD requirements, with emphasis also on clinical audit/re-audit

ESR survey on the Current Status of Uptake of BSSD Requirements (focus on audit) – 2018/2019

Key points

- Clinical audit is a mandatory component of the BSSD; radiology departments will need to show evidence of compliance with the BSSD and supporting processes of clinical audit.
- 64% of invited departments participated.
- Survey results demonstrated a generalised lack of compliance with BSSD radiation protection and clinical audit requirements.
- Survey results indicate the need for co-ordinated action, involving relevant European organisations and national bodies, to improve BSSD uptake and to develop clinical audit programmes within European radiology departments.

ESR survey on current status of clinical audit in radiology - 2019

“The Current Status of Radiological Clinical Audit and Feedback on the ESR Clinical Audit Guide and Tool (*Esperanto*) – an ESR Survey of European Radiology Departments”

- Paper published in February 2020 in *Insights into Imaging*
- Survey carried out among European radiological departments through ESR National Member Societies, EuroSafe Imaging Star departments
- Follow-up survey planned in January 2021 as positive effects may be discernible since publication of *Esperanto*

ESR survey on current status of clinical audit in radiology

Key points

- Effective clinical audit is a key priority for all radiology departments across Europe, with the potential to improve patient care and outcomes.
- There is increasing emphasis on external direction of internal departmental clinical audit, with oversight/accreditation provided by suitable professional, or scientific national bodies.
- 36/47 (76.6%) of European National Radiology Societies responded to a 2018 ESR survey evaluating the current status of radiological clinical audit.
- Responses revealed an appreciation of the importance and role of clinical audit, but highlighted shortfalls in necessary resourcing and infrastructure that could facilitate wider and more effective involvement of national societies.

In summary

- ESR continues its commitment to raise awareness of and support imaging departments in the development of clinical audit
- BSSD compliance & audit structures are work in progress across Europe's radiology departments and active update of BSSD must be promoted and guidance provided
- Need to promote national inter-departmental audit & clinical best practice networks
- European professional societies like ESR have an important role to play

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ESR EUROPEAN SOCIETY OF RADIOLOGY myESR.org