

Transition from peer review to peer learning - Considerations for accreditation

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Questions to answer

Are certifying bodies willing to support a transition from peer review to peer learning? What do we need to consider?

Short Answer

Are certifying bodies willing to support a transition from peer review to peer learning?

YES for the American College of Radiology

Caveats

- Perspective is that of one accreditation program, albeit a large one
 - ACR Accreditation Program covers 9 imaging modalities and approx. 25k unique facilities
- Addressing the considerations of this program should set us up to address similar considerations for other accrediting/certifying bodies.

Outline of talk

- Peer review in ACR: Role and Historical background
- Current state
 - Nature of use of peer-review
 - Bridge between peer-review and peer-learning
- Considerations for formal inclusion of peer-learning
 - Procedural
 - Regulatory
 - Cultural
 - Opportunities and pathways

Peer review in ACR Programs

- Introduced for use in 2002-2003 as RADPEER
 - Motivation: While practice-based learning and improvement was a focus for ACR, no standardized national systems existed that were easy to use, systematic, and integrated into quality assurance.
- Peer-review requirement added to ACR Accreditation in 2007

Original conception of RADPEER

RADPEER Quality Assurance Program: A Multifacility Study of Interpretive Disagreement Rates¹

James P. Borgstede, MD^a, Rebecca S. Lewis, MPH^b, Mythreyi Bhargavan, PhD^b,
Jonathan H. Sunshine, PhD^{b,c}

Purpose: To develop and test a radiology peer review system that adds minimally to workload, is confidential, uniform across practices, and provides useful information to meet the mandate for "evaluation of performance in practice" that is forthcoming from the American Board of Medical Specialties as one of the four elements of maintenance of certification.

Method: RADPEER has radiologists who review previous images as part of a new interpretation record their ratings of the previous interpretations on a 4-point scale. Reviewing radiologists' ratings of 3 and 4 (disagreements in nondifficult cases) are reviewed by a peer review committee in each practice to judge whether they are misinterpretations by the original radiologists. Final ratings are sent for central data entry and analysis. A pilot test of RADPEER was conducted in 2002.

Results: Fourteen facilities participated in the pilot test, submitting a total of 20,286 cases. Disagreements in difficult cases (ratings of 2) averaged 2.9% of all cases. Committee-validated misinterpretations in nondifficult cases averaged 0.8% of all cases. There were considerable differences by modality. There were substantial differences across facilities; few of these differences were explicable by mix of modalities, facility size or type, or being early or late in the pilot test. Of 31 radiologists who interpreted over 200 cases, 2 had misinterpretation rates significantly ($P < .05$) above what would be expected given their individual mix of modalities and the average misinterpretation rate for each modality in their practice.

Conclusions: A substantial number of facilities participated in the pilot test, and all maintained their participation throughout the year. Data generated are useful for the peer review of individual radiologists and for showing differences by modality. RADPEER is now operational and is a good solution to the need for a peer review system with the desirable characteristics listed above.

Key Words: RADPEER, quality assurance, observer performance, disagreement rate, interpretation, misinterpretation

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responsibilities of this task force included the evaluation of MOC, practice-based learning and improvement, and peer review. The task force evaluated the ACR's continuous quality improvement (CQI) manual [3]. This manual has included sample radiology peer review programs for the past 7 years. After evaluating existing peer review programs, the task force concluded that to meet the fourth requirement of maintenance of certification, a successful peer review program must be national, uniform in structure and function across practices, accurate, facile, nonpunitive, and able to be integrated into a facility's quality assurance program. The task force concluded that no existing programs met these criteria and that a single peer review program with objective measurements of quality was preferable to a choice of sample programs. This was the motivation for the ACR's development of RADPEER.

RADPEER is based on the premise that whenever a new

Peer-Review in Accreditation

- ACR Accreditation is a prospective assessment of a facility's readiness to deliver quality imaging, as characterized by the radiology profession in Practice Parameters.
- Peer-review requirement ensures that there is some system at the accredited facility that ensures continuous quality assessment and improvement of the radiology interpretation.

Specifics of the peer-review requirement

- A double reading assessment
- Allows for random selection of studies to be reviewed on a regularly-scheduled basis
- Reviews exams and procedures representative of the actual clinical practice of each physician
- Reviewer assessment of the agreement of the original report with subsequent review (or with surgical or pathological findings)
- Classification of peer review findings with regard to level of quality concerns (one example is a 4-point scoring scale)
- Policies and procedures for action to be taken on significantly discrepant peer review findings for the purpose of achieving quality outcomes improvement
- Summary statistics and comparisons for each physician by imaging modality
- Summary data for each facility/practice by modality

Current State: Nature of use

- RADPEER widely used
- Used beyond just scoring; used on local learning efforts and quality conferences
- Some facilities switched to explicitly peer-learning programs; use program documentation to meet accreditation requirement

RADPEER – how to use beyond scoring

Getting the Most Out of RADPEER™

Paul A. Larson, MD^a, Robert S. Pyatt Jr, MD^b, Charles K. Grimes, MD^c,
Hani H. Abudujeh, MD, MBA^d, Kenneth W. Chin, MD^e, Christopher J. Roth, MD^f

RADPEER™ is a quality assessment and improvement product developed and marketed by the ACR. Although the program has been available since 2002 and the scoring system was revised in 2009, the ACR allows considerable flexibility in its implementation. Although that flexibility supports the local needs of radiology groups using the program, it also may lead to suboptimal implementation of the program and may limit the usefulness of the data obtained. The authors, who are members of the ACR RADPEER Committee, provide 11 specific suggestions to optimize the performance of RADPEER and suggest opportunities for future improvement of the program.

Key Words: Peer review, performance improvement, quality assessment, quality improvement, RADPEER™

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INTRODUCTION

RADPEER™ is a quality assessment and improvement product developed and marketed by the ACR. It allows the assessment of interpretation quality similar

disadvantages. A third party is required to compare the 2 readings and determine whether there is a significant discrepancy. When a discrepancy is found, further investigation is needed to try to determine which reading (if

2016 RADPEER goal - Bridge to peer-learning

ORIGINAL ARTICLE **LEADERSHIP**



ACR RADPEER Committee White Paper with 2016 Updates: Revised Scoring System, New Classifications, Self-Review, and Subspecialized Reports

Sblomit Goldberg-Stein, MD^a, L. Alexandre Frigini, MD^b, Scott Long, MD^c, Zeyad Metwalli, MD^{b,d}, Xuan V. Nguyen, MD, PhD^e, Mark Parker, MD^f, Hani AbuJudeh, MD, MBA^g

Abstract

The ACR's RADPEER program is currently the leading method for peer review in the United States. To date, more than 18,000 radiologists and more than 1,100 groups participate in the program. The ABR accepted RADPEER as a practice quality improvement in 2009, which can be applied toward maintenance of certification; there are currently over 2,200 practice quality improvement participants. There have been ongoing deliberations regarding the utility of RADPEER, its goals, and its scoring system since the preceding 2009 white paper. This white paper reviews the history and evolution of RADPEER and eRADPEER, the 2016 ACR Peer Review Committee's discussions, the updated recommended scoring system and lexicon for RADPEER, and updates to eRADPEER including the study type, age, and discrepancy classifications. The central goal of RADPEER to aid in nonpunitive peer learning is discussed.

Key Words: RADPEER learning, peer review, peer learning, RADPEER, nonpunitive

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TAKE-HOME POINTS

- Learning is the most important outcome that can be achieved using RADPEER data; education sessions are at the heart of serious peer learning processes.
- The revised RADPEER scoring system replaces the previous 4-point scale with a 3-point scale, effectively merging previous scores of 3 and 4.
- The scoring system was updated to unburden reviewers from the process of determining the severity of an error and instead refocus efforts toward nonpunitive peer learning.
- eRADPEER updates include classifications by age, body system, and discrepancy type (perception, interpretation, communication) to facilitate learning conferences and focused improvements.

RADPEER Criteria added for learning

- Flagging interesting cases
- Simplified scoring to support focus on learning rather than classifying
- Adding details to help with learning, such as nature of error and more characteristics of exam

Bridge to Peer-learning

- ACR Funded Innovation Grant, awarded to Dr. Kruskal, resulted in development of RAD-Improve, a peer-learning platform.
- Intent to pilot in 2020 and make available to RADPEER sites and others

DASHBOARD

What is RAD Improve?

RAD Improve is a peer-learning platform for radiologists to learn from near-misses and errors in order to improve clinical performance. It is meant as a non-punitive way for peers to share errors or all kinds, for example, clinical, management, or systemic, and learn from them. This pilot version of the program is being developed using an ACR Innovation Fund Grant awarded to Dr. Jonathan B. Kruskal, Chairman of Radiology at the Beth Israel Deaconess Medical Center, with input from Dr. Seth Berkowitz.

Why RAD Improve?

To reduce errors in diagnosis and thus to add value to clinical care and patient outcomes.

Who can participate in RAD Improve?

Physicians at all levels of their career can participate. There are two main roles in which you can participate:

- As a submitter: Submit cases, with or without images, using templated forms and provide a brief analysis of the error.
- As a learner: Use submitted cases for self-study, in morbidity and mortality conferences, or for teaching.

CREATE NEW CASE

[Diagnostic Case](#)[Management Case](#)

EDIT CASE

[Edit a Case](#)

ACCESS CASE

[Work a Case as Learner](#)

Case Submission

CASE CREATE DIAGNOSTIC CASE

Cancel Clear

Save

Submit for Review

Continue to Advanced Editing

Case Info

Case Name

*

Clinical Scenario

*

Case Type


Modality

Subspecialty

Category

Images

Upload Images



Drag & Drop

[Browse files](#) or [Click here & Paste \(Ctrl+V\)](#) ⓘ

*

Multiple Choice Question

Multiple Choice Question

Learning from cases

CASE OVERVIEW

Cases to Review

Cases to Learn

Clear	♥	Published Date	Case ID	Category	
<input type="text" value="Search"/>	♥	12/18/19	55040		START
Category	♥	07/17/19	53643	Diagnostic Error, Interpretive Error	START
Subspecialty	♥	07/17/19	53519	Near Miss, Procedural complication	START
Modality	♥	06/06/19	53451	Great Call	START
	♥	06/05/19	53437	Risk management, Technical Error	START

Peer-learning in the ACR Accreditation program

- Time is right to explicitly include peer-learning programs in Accreditation, and in Center of Excellence Programs
- There is a structured process to introduce this into accreditation and a review pathway.

Considerations: Process

- To change an accreditation requirement, we need approval by the Committee of Accreditation Chairs, and the Chair of the Commission on Quality and Safety
- Recommendations from this group can be shepherded through the review and approval process by ACR staff.
- Recommend starting with peer-learning as add-on to peer review. Changing peer-review requirement to “peer-review/peer-learning.”

Considerations: Regulatory

- ACR is a CMS-approved accrediting organization for advanced diagnostic imaging (CT, MR, NM, PET).
- All changes to the program **MUST** be approved by CMS prior to implementation.
 - Need a clear characterization of the recommended standard components of a peer-learning program
 - Need a justification for why this is good for patient care
 - Need to quantify the use of peer-learning now and expected uptake in near future
 - Need to address impact on facility burden

Considerations: Cultural

- Sudden changes in accreditation requirements, even if it is adding additional options, can be alarming to facilities. So clear communication is important.
- Many facilities currently using peer-review may like to transition to peer-learning but be unsure of how. It is important to be cognizant of this struggle in any recommendations to encourage buy-in and adoption.

Considerations: Opportunities and Pathways

- There is increasing interest in peer-learning. So the time is right for a workgroup like this to make recommendations for what constitutes an “acceptable” program.
- Guidance on ways to incorporate peer-learning into practice workflow and tool selection would be helpful.

Considerations: Opportunities and Pathways

Highlighting successful implementations as Imaging 3.0 Case Studies is a helpful dissemination channel. (ACR staff write these case studies; minimal to no burden on featured group.)

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Case Study: Bringing Errors to Light



Radiologists in Massachusetts implement a “just culture” model, creating a fair and transparent way to address and solve medical errors.

By Meghan Edwards

Key Takeaways:

- Radiologists at Lahey Hospital and Medical Center implemented “just culture” — a method of investigating why errors happen and how to address them in a fair and transparent way.
- Although the application of the just culture model can appear complicated at first, Lahey’s radiologists have found that using real-life scenarios helps employees better understand just culture concepts
- Recognizing that culture change takes time, Lahey’s radiologists have committed to continually reinforcing the culture change — helping employees feel comfortable admitting errors — they seek to implement.

When Jennifer C. Broder, MD, became the vice chair of quality and safety at Lahey Hospital and Medical Center in Burlington, Mass., she noticed a concerning trend: Members of the department, including both physicians and technologists, were reluctant to disclose mistakes due to embarrassment and fear of punitive action or retribution. Instead, errors were often buried and never addressed.

“From a quality and safety perspective, that behavior negates the opportunity for improvement,” says Broder, who is also an assistant professor of radiology at Tufts University in Boston. “We should be looking at every mistake to understand its context and why it happened, so we can prevent it from happening again.”

With this in mind, Broder approached Christoph L. Wald, MD, PhD, MBA, FACR, the radiology department chair, about creating an environment in which employees feel comfortable talking about mistakes with leadership. “When we talked about it, we decided that we needed to change the culture of our department. For employees to be comfortable coming forward about errors, we needed to have a fair and transparent way to address issues — one that would follow the same



Jennifer C. Broder, MD, vice chair of quality and safety at Lahey Hospital and Medical Center, led implementation of the just culture model within the radiology department.

Next Steps

- Publish recommendations on what constitutes peer-learning
- Bring recommendations to ACR Committee of Accreditation Chairs and request inclusion for meeting accreditation requirements
- On approval, staff will carry document through regulatory approval and develop a timeframe for implementation.

Questions?

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