

Suggested features for Peer Learning software: Vendor Checklist

The effectiveness of a radiology quality and patient safety program is enhanced by an ongoing understanding of prevailing errors. Peer learning incorporates a just culture environment of continuous learning improvement in which errors, near miss-events and great calls are purposefully evaluated in a nonpunitive structure to drive error reduction through education and systems improvement. Efficient software functionality is critical to the organization and implementation of peer learning.

Peer learning is a group activity in which expert professionals review one another's work, actively give and receive feedback in a constructive manner, teach and learn from one another and mutually commit to improving performance as individuals, as a group and as a system. A peer learning program must include the ability for radiologists to identify learning opportunities during their regular workflow, submit learning opportunities to a peer learning coordinator/leader, allow for the editing of peer learning cases and have a workflow for the review of peer learning submissions communication with the original interpreting radiologist as appropriate.

A software that supports the peer learning program requirements as well as provides peer learning case categorization, peer learning conference preparation, delivery and documentation would be a valuable tool for facilities who are struggling with the organization and maintenance of their peer learning programs. Vendors who have the desired functionality will not only attract customers to their platforms but will also stand out from others who do not offer such valuable tools for peer learning physician quality assurance.

Access

X	CRITERIA	ACTION
	Roles	Defined user roles and access for organizational administrators, peer learning leader, interpreting radiologist/physicians.
	Selective access	Access to the database of peer learning case nominations must be assignable by an organizational administrator, who should be able to restrict access to other individuals based on defined criteria (e.g., division peer learning leaders have access to exams nominated for their division only).
	Subgroups	Organizational administrators should be able to control which users can see all or a subset of anonymized nominated exams. They should also control which users can edit comments or categories for those exams and which users can view the exams in an anonymized fashion. Example: An organization administrator creates a sub-group for neuroradiology cases. The neuroradiology group leader can modify and update all cases within that group and neuroradiology learners can access the neuroradiology cases for learning.

Data Management

X	CRITERIA	ACTION
	Repository	Store, tag and archive cases nominated as peer learning opportunities.

	Analyze data	Allow organizational administrators to analyze system data to best understand how their organization is using the system as well as to meet the reporting requirements for accreditation.
	Track data	Track measures including radiologist nomination rate, total nominations over time by subspecialty, cases by discrete data tags, cases presented by peer learning leader, peer learning leader communication with interpreting radiologist
	Confidentiality/peer review protection	Peer learning nominations must be hidden from public view and not medicolegally searchable. The nominated cases should be controlled by the organizational administrators and stored in a separate database. (e.g., nominated cases and the peer learning data should not be searchable/viewable by generic radiology or other users unless given explicit access by administrators.)

Submission

X	CRITERIA	ACTION
	Workflow	The system must support workflows for radiologists to easily flag cases for peer learning when the case is being reviewed as the primary exam or as the comparison exam.
	Flag functionality	<p>To flag and categorize cases, radiologists should have it as a part of the reading workflow. This functionality should allow for flagging of a specific exam and not just the MRN or current case.</p> <p>Example: During a standard interpretation, the reading radiologist thinks a prior exam could be a good peer learning case. The reading radiologist marks the specific exam for nomination and enters a reason for the submission, categorizes it (learning opportunity, great call, etc.) and submits the case. The submission appears on a review worklist for the peer learning leader to review.</p>

Nomination Review

X	CRITERIA	ACTION
	Workflow	<p>Peer learning leaders must have a worklist to review and edit nominations.</p> <p>Example: The peer learning leader reviews a worklist of submitted cases. They can edit the case submission, reason for submission, further categorize the case and enter teaching points for case conferences.</p>

Categorization

X	CRITERIA	ACTION
	Workflow	The peer learning leader must be able to tag the cases using standard terminology/common data elements.
	Data elements	During the review by the peer learning leader, discrete values should be allowed in addition to free text comments to allow for searching and organizing purposes.

Example: During the review, the peer learning leader will mark the case with discrete tags such as “adrenal”, “motion blur” that can be used for further searching and organizational purposes. The leader can enter a free text comment.

Learning Opportunity Communication

X	CRITERIA	ACTION
	Feedback functionality	<p>The peer learning leader must be able to easily share comments and feedback from nominated cases with the original interpreting radiologist.</p> <p>This communication functionality should include:</p> <ol style="list-style-type: none"> 1. An Opt-in/out function, in the event a peer learning leader does not think the feedback is warranted or valuable. 2. Ability to anonymize the feedback to the nominating radiologist to preserve relationships.

Peer Learning Conference Preparation, Delivery and Documentation

X	CRITERIA	ACTION
	Preparation	<p>The system must facilitate the development of peer learning conferences in which the peer learning leader can show anonymized cases.</p> <p>Example: Users with controlled access given by the administrators, select cases they intend to share during a peer learning conference. These cases, with the learning review tags and comments, are anonymized and exported into standard image and document formats (.png, .docx, .mp4, .pdf etc.) for use in conference presentation material.</p>
	Delivery	<p>Features should include the hiding of name/MRN/accession number information, exam dates, and scan locations. There should also be access to relevant comparisons in the patient jacket.</p> <p>Example: The peer learning software can have a presentation mode. The peer learning leader can designate multiple cases for presentation and/or select images or series for presentation and the software queues up those images and associated teaching points for viewing.</p>
	Documentation	<p>Preparation of conference minutes.</p> <p>Example: After the peer learning conference, an anonymized list of cases shared, and teaching points can be exported by the peer learning leader.</p> <p>The documentation could also include:</p> <ol style="list-style-type: none"> 1. Date of conference 2. Number of attendees 3. Number of cases presented