Smartphone Interventional Radiology Peer Review System Integrated into Daily Board Rounds

The Problem
- Interventional radiologists already perform peer review as part of daily board rounds. However, existing data capture tools do not fit into the daily workflow.
- Existing diagnostic radiology peer review systems focus on diagnostic accuracy, rather than on procedural technique, and are therefore unable to portray the full spectrum of interventional radiology (IR) practice.

Aim/Goal
- To develop a smartphone-based, IR-tailored, peer review tool that would capture more IR cases compared with a traditional peer review system.

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The Interventions
- During daily follow-up conference, a single attending submitted a consensus opinion after case discussion regarding clinical decision making and procedure technique appropriateness were graded on a 3 point scale (agree, acceptable alternative, inappropriate).
- Complications were listed according to the SIR guidelines.
- A near miss category identified cases where a complication was narrowly avoided. Outcome was graded as successful or not.
- A learning opportunity field flagged cases with useful teaching points.
- Free text could also be entered.

The Results
- 200 cases were entered during the first 6 months of implementation.
- 181/200 successful procedures.
- 15 minor and 2 major complications. 1 near miss and 5 learning opportunities.
- 7/76 cases were graded as acceptable alternative for technique and 2/72 cases were graded as acceptable alternative for clinical management.
- During the same time period 1 year ago, 7 IR attending staff entered a total of 101 cases into the department’s peer review system with only 13 (13%) representing IR procedures and these were all rated as complete agreement.

Lessons Learned
- The field of interventional radiology lends itself to continuous practice improvement through daily peer review at morning rounds. We built an IR-tailored peer review tool to capture outcomes and clinical practice variation.

Next Steps/What Should Happen Next
- Improved data entry adherence.

For More Information Contact
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