Transitioning from Peer Review to Peer Learning in a Multi-Centric Group Practice

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Presenters & Disclosure of Commercial Interest

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Disclosures:

None of the authors nor their immediate family members have a financial relationship with a commercial organization that has a direct or indirect interest in the content.

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Purpose

Learning from Errors

- The 2015 report by the Institute of Medicine (IOM), *Improving Diagnosis in Healthcare*, highlighted the impact of diagnostic errors in medicine and suggested several strategies for improvement [1].

- At the core of these strategies is a cultural transformation from a judgmental paradigm to a non-punitive system based on the ideal of learning from errors and near-misses in a safe and protected space.

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Purpose

Limitations of Traditional Peer Review Programs

- Many popular peer review programs focus on error detection, numerical scoring of errors, and radiologist-specific error rates. Such programs, while useful to meet accreditation obligations (such as Ongoing Professional Practice Evaluation), generally fail to meet the ideals of the IOM report. Additionally, their effectiveness as a system has been questioned [2].
- In contrast, peer learning programs:
  - Focus on education and learning from errors and near-misses
  - Capture variances (errors) and other opportunities for learning detected by radiologists during their routine work outside of these programs

Addressing Limitations

- To address the limitations of popular peer review programs, our group practice (Radiology Partners; "RP") consisting of multiple locally-led practices across nine states developed a second, separate internal Variance Program.

- This internal Variance Program was designed with peer learning ideals, emphasizing collaborative learning in a legally protected, safe space. Specifically, it **does not**:
  - Track individual radiologists
  - Generate error rates
  - Emphasize numerical scoring

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Methods & Materials

Structure of Variance Program
- Radiologist leaders, in consultation with a legal team, developed a structure of peer review committees (PRCs) for locales where there is an RP practice.
  - PRCs consist of local radiologists.
  - Seven of RP's local practices in six states implemented the program.
- Legal structure was created such that peer review data is protected from outside groups, including hospitals, and from legal discovery under each state's statutes.
- In collaboration with our IT team, methodology was developed to store peer review data in a secure format only accessible to local PRC members.

Implementation of Variance Program
- Creation of simple and secure online web forms devised to enable radiologists to enter cases with minimal disruption of work flow. Sites using cloud-based PACS systems have capabilities to flag cases and enter a brief description.
- Onsite and web-based meetings were held to familiarize our radiologists with the non-punitive, non-judgmental and educational goals of the program, as well as the operations of the program.
- Radiologists are encouraged, but not mandated, to enter any variances, as well as great catches and teaching cases they encounter during routine work, and also any variances reported by a referring physician or other outside sources.
- Entries are reviewed in a timely manner by members of the local PRC.

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Methods & Materials

Enabling Education Through Variance Program

1. After reviewing entered cases, local PRCs provide feedback to the interpreting radiologist(s) and follow-up with referring physicians.

2. Data is analyzed by support staff to create monthly rolling scorecards, summarizing data for prior 12 months.

- Frequency of types of variances entered (identifies any trends of concern in the local practice)
- Local practice and radiologist participation in program (measured to encourage participation)
- Aging analysis of cases pending review
- Submitted cases are used for learning case conferences which are posted on RP's internal online portal and available for CME credits.

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Results

Rolling 12 month Local Practice Variance Summary Report (Sample)

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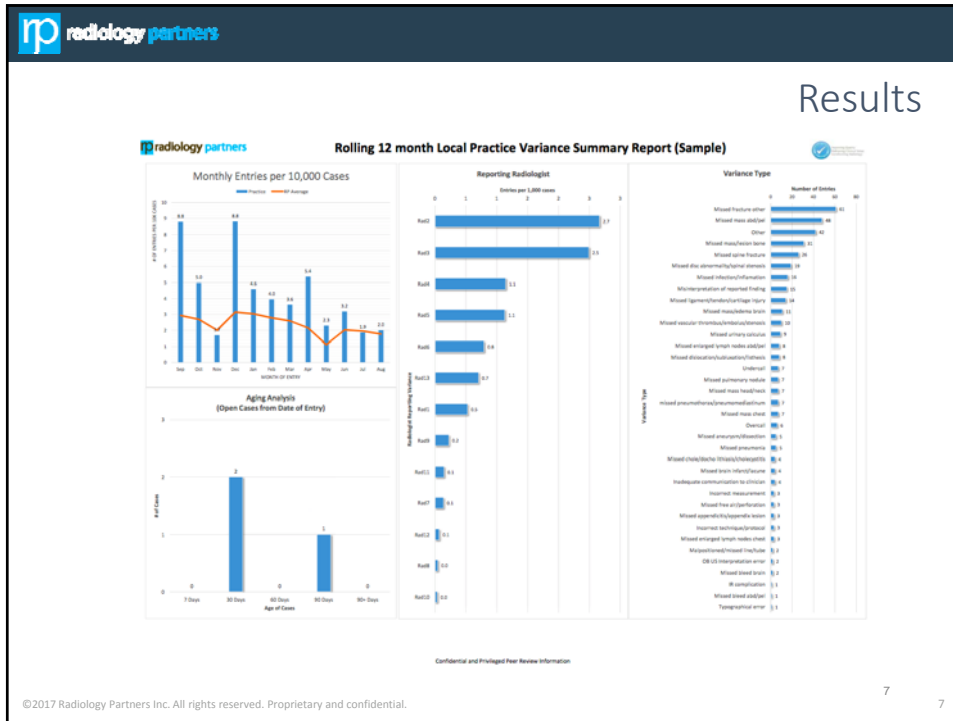
Results

Transition from Peer Review to Peer Learning System

- Over a 24-month period (April 2015 - March 2017), 1,482 cases were entered into the Variance Program across all seven participating sites.
  - 1,304 (88%) were reported as variances
  - 98 cases (7%) were reported as great catches
  - 80 cases (5%) were reported as teaching cases
- In 11% (148/1,304) of the reported variances, the local PRC members agreed with the initial interpreting radiologist, determining upon review that the reported variance was not actually a variance.
  - Of these 148 cases, 35 (24%) were brought for review to the reporting radiologist by a referring physician as a variance in the (incorrect) opinion of the referring physician.
- Multiple practice-wide learning conferences have been held utilizing cases entered into the Variance Program and posted on the practice's internal online portal for review at the radiologists' convenience. One local practice holds their own regular learning conferences.
- Topics of learning conferences have included: General and subspecialty themes (for example, thoracic imaging conference), variances resulting from failure of system operations (faulty/incomplete history, incorrect technique/protocol), unexpected findings, and incorrect interpretations of correctly made findings.

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Conclusion

- Recognizing the deficiencies of traditional peer review systems, and consistent with the goals outlined in the IOM report, we developed an innovative voluntary internal Variance Program, designed to shift from peer review to peer learning.
- The focus of our Variance Program is on education through collaborative learning from sharing of our
  - Mistakes
  - Great catches
  - Teaching cases
- The non-punitive and legally protected structure of the Variance Program provides a safe environment to accomplish these goals.
- It supports our practice's broader aim of prioritizing safety and enhancing clinical value for our patients and clients.

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References, Questions and Comments

References:

1. Balogh EP, Miller BT, Ball JR, eds; Board on Health Care Services, Institute of Medicine. Improving diagnosis in health care. Washington DC: The National Academy of Sciences, The National Academies Press, 2015.

2. Larson DB, Donnelly LF, Podbersky DJ, Merrow AC, Sharpe RE and Kruskal JB. Peer Feedback, Learning, and Improvement: Answering the Call of the Institute of Medicine Report on Diagnostic Error. Radiology 2017; 283:1, 231-241

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