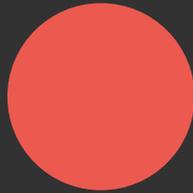


# RED SIGNAL REPORT<sup>SM</sup>

August 2018  
Vol. 1 No. 1

Claims Data Signals & Solutions to Reduce Risks  
and Improve Patient Safety.

## RADIOLOGY



**COVERYS**<sup>®</sup>



MEDICAL LIABILITY INSURANCE • BUSINESS ANALYTICS • RISK MANAGEMENT & EDUCATION

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## I. Introduction

In an effort to respond to increasing demands on providers to adhere to a multitude of metrics, Coverys has designed the Red Signal Report<sup>SM</sup> series to assist healthcare organizations in identifying issues that impact risk management, patient safety, and quality outcomes. For example, the Medicare Access and CHIP Reauthorization Act (MACRA) and its associated payment models (Merit-based Incentive Payment System [MIPS] and Advanced Alternative Payment Models [AAPMs]) have introduced numerous metrics which providers are incentivized to adhere to or be subject to significant economic penalties. Many of these metrics overlap with other important risk management focus areas. By mapping these overlapping areas, providers are able to target education and practice change initiatives that help reduce risk and increase both patient safety and reimbursements. The Red Signal Report<sup>SM</sup> series will identify the major risk factors, claims warning signals, and safety vulnerabilities within specific specialties and clinical areas where education and practice change initiatives can improve patient safety, reduce malpractice exposures, and increase reimbursements for providers.

## II. Executive Summary: Radiology

Claims alleging errors in radiology practices are common in medical professional liability claims. Such errors can have a profound effect on the patients impacted from the delay or incorrect management of a clinical diagnosis. These misdiagnoses can be life-threatening or life-altering – in fact, Coverys data shows that patient death is the highest clinical outcome in radiology claims. A recent report by the **Institute of Medicine (IOM)** titled “Improving Diagnosis in Healthcare” specifically references radiology and pathology professionals and emphasizes their critical role in the determination of accurate diagnoses. However, as the malpractice data shows, these providers are not always engaged as part of the diagnostic team.<sup>1</sup>

This Red Signal Radiology Report will review five years of Coverys’ closed claims to help identify major risk factors, illuminate the warning signals and safety vulnerabilities within radiology practices, and provide evidence-based recommendations. This will help radiologists get ahead of the risks, allowing them to take proactive steps to avoid harm from actually reaching the patient.

# Coverys Utilizes a Value-Based Model to Improve Outcomes



Coverys analytics leverages claims data to mine and capture prominent risk signals.

Coverys Risk Management provides the methodology for on-site assessment or a self-assessment tool to identify and validate the presence of risk signals.

The Risk Management team recommends proactive tools and best practice models to combat risk exposures and improve patient safety.

Implementation of measurement tools can document progress or expose further areas needing intervention.

**Signals**

**Assess**

**Implement**

**Improve Outcomes**

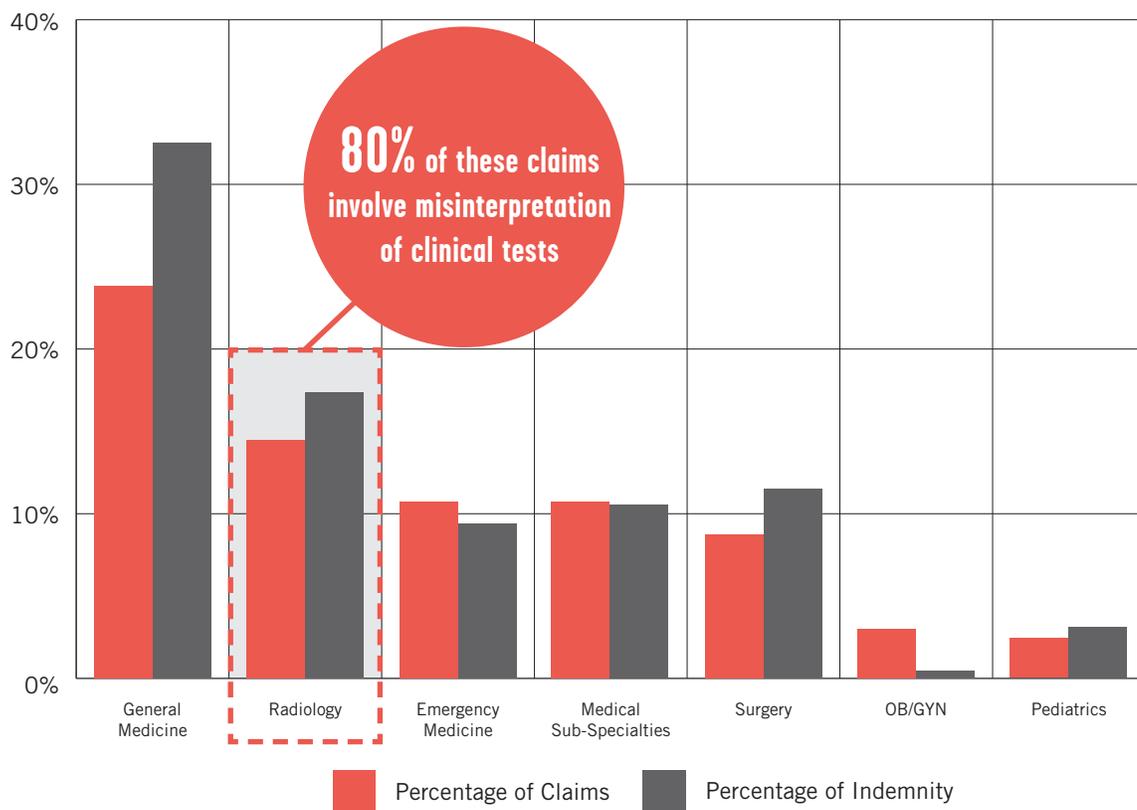
## III. Key Data Displays

Malpractice data, while a look to the past, can provide “signal intelligence” for potential risks in radiology departments that might not be on the radar of care team members and risk managers. A review of Coverys claims (N=10,692) that closed between 2013 and 2017 provides insight into radiology-related risks that have been the most prevalent in the clinical environment, and may still be at play in the current practice. Claims naming a radiologist (N=595) often involve significant patient harm and most frequently allege an incorrect or delayed diagnosis of a patient’s condition.

### Top Diagnosis-Related Providers

Radiologists are involved in 15% of diagnosis-related claims, second only to those of general medicine providers. Within this category of claims, 80% of the missed diagnoses are alleged to have resulted from the misinterpretation of clinical tests. (Figure 1)

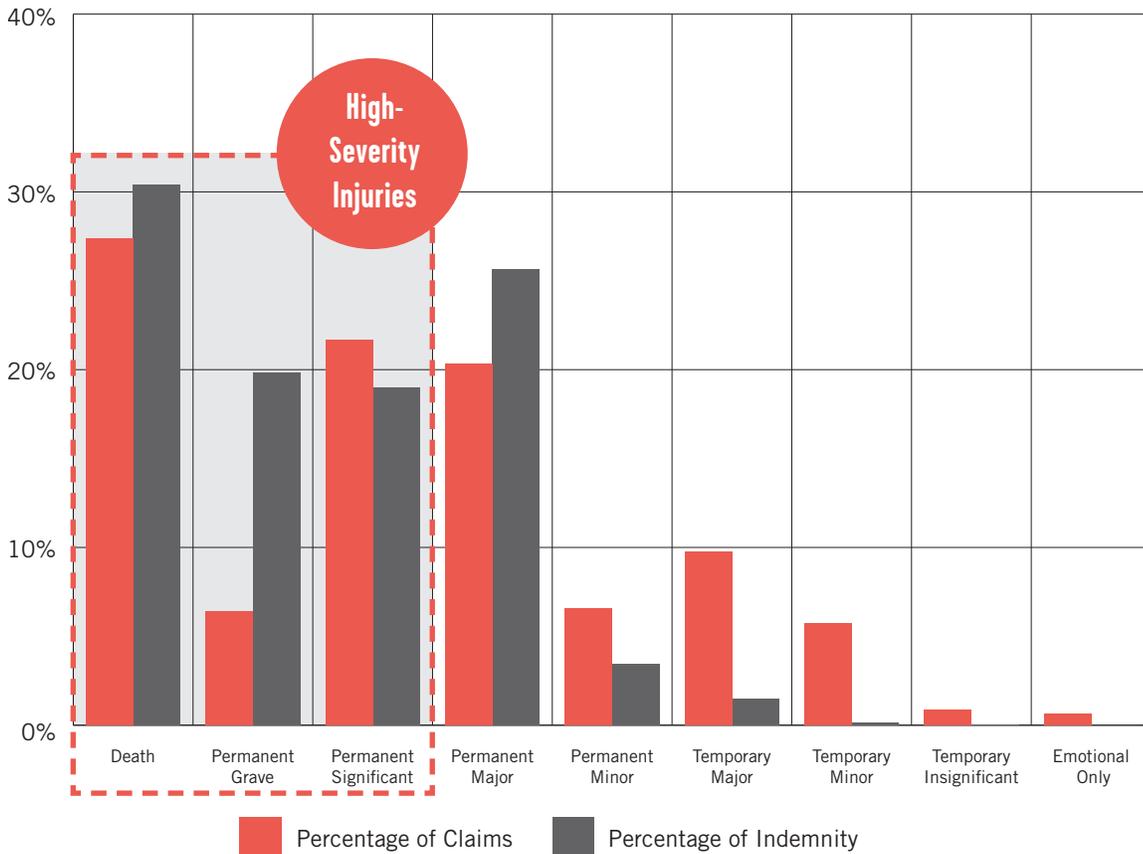
**Figure 1. Diagnosis Related Claims**



Section: N=3,507 closed PL claims from 2013-2017 with a Diagnosis-Related allegation

Among radiology claims alleging diagnostic failure, cancer diagnoses are the most frequent. The top four cancer conditions associated with the alleged misinterpretation of diagnostic tests are breast, lung, pancreatic, and ovarian. Many claims allege that a lack of follow up on abnormal test results, such as from radiology or primary care, leads to a high-severity patient injury.

**Figure 2. Radiology Injury Severity**



Section: N=595 closed PL claims from 2013-2017 with a Radiology specialty

Signals

Assess

Implement

Improve Outcomes

#### IV. What Questions Are Posed By the Signals?

- Is there a closed-loop tracking system or process in place to identify outstanding test results and follow-up studies?
- Is there a process for communicating test results during transitions of care between the inpatient and outpatient setting?
- Are electronic health records with alert-based notification systems sending abnormal test results to both the ordering provider and primary care provider?
- Are there criteria and processes in place to address the need to escalate and communicate the urgency of performing a recommended imaging study or intervention?

## V. Risk Recommendations for Radiology

- **Use decision support tools and standard treatment protocols** to manage workflow and meet patient needs.
- **Develop criteria to determine whether a second read of a film *must be performed***, including the timeframe for completion. The process should include confirmation back to the radiologist that the second read has been received.
- **Develop report templates** that require specific elements, such as problems suspected, problems that have been ruled out, and the probable diagnosis and recommendations. Discourage use of disclaimers or language such as “dictated but not read.”
- **Use clear language**, avoiding interpretive phrases such as “cannot rule out,” “consistent with,” or “likely represents.”
- **Incidental findings and their recommendations should be separated from the rest of the report** or highlighted within the report to draw attention to those findings.
- **Apply appropriate use criteria and other guidelines at the point of order** to ensure the necessary studies are done for a specific clinical condition.
- **Implement checklists** which can help circumvent some cognitive biases and decrease reliance on memory.
- **Implement formal quality improvement methods**, practice changes, or other performance improvement processes.
- If tele-radiology is practiced in the facility, **conduct regular testing for film and transmission quality.**
- **Revise standards as technology changes** – e.g., Digital, 2D, 3D
- **Revisit peer review practices** to ensure they address how to measure and communicate periodic evaluation of clinical outcomes and compliance with established quality indicators, and when performance may warrant closer review.

## VI. Alignment of Risk Recommendations with Quality Measures

Value-based purchasing is emerging as the de facto method of reimbursement with the MIPS and AAPMs metric incentives and penalties. The healthcare system is experiencing a paradigm shift by associating quality measures and the costs associated with delivering care to predict the financial health of an organization. This approach will financially impact how radiologists and other healthcare systems regard reimbursement and incentives.

The following quality measures are directly associated with the **Coverys risk recommendations and are linked to financial reimbursement.**

- ✓ Use of electronic notes in the patient record
- ✓ Adoption of electronic health record (EHR) applications within the healthcare setting
- ✓ Order tracking within the EHR to manage and route results to responsible ordering clinicians
- ✓ Electronic test results routed to ordering providers for acknowledgement
- ✓ Use of clinical decision support systems to aid in driving appropriate interventions
- ✓ Process for closing the referral loop with receipt of specialist reports and communication of abnormal findings

## VII. Summary

Radiologists play an ongoing and critical role in the delivery of an accurate patient diagnosis, and it is paramount that they are actively integrated into the diagnostic team. Examination of radiology claims data can help signal potential vulnerabilities during the diagnostic process of care. Assessment of current radiology processes may reveal opportunities where Coverys recommendations could close existing gaps – whether it's in the interpretation phase, the communication phase, or in the follow-up phase.

In the long run, putting best practices in place will help improve patient outcomes, reduce malpractice exposure, and address key quality measures that align with MACRA, MIPS, and AAPM payment model metrics which could have a favorable impact on reimbursements.

### *Sources*

1. <https://www.nap.edu/read/21794/chapter/2#7>





**Coverys is a leading provider of medical professional liability insurance to help protect healthcare professionals. We are committed to providing data-driven insights to reduce claims, and proactive risk management and education services to increase quality patient outcomes. Our services are designed to help clients reduce distractions to improve clinical, operational, and financial outcomes.**



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