



# WHAT MORE INTELLIGENT IMAGING DATA MANAGEMENT MEANS TO **RADIOLOGISTS**

FROST & SULLIVAN WHITEPAPER CHAPTER

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# Introduction

Workflow, work engagement, and burnout are cornerstone concerns of radiologists today. When it comes to digitization and technology, radiologists find themselves at the nexus of a transformation strategy affecting everything from individual images to the entire enterprise. Provider organizations can build a strong data and infrastructure foundation to reimagine healthcare when imaging information management innovations are attuned to these concerns.

## Meeting Needs and Desires of Radiologists

Radiologists must deal with a variety of tasks and interruptions which take their focus off of core image interpretation, and reading and report turnaround. In the Vancouver Workload Evaluation Study in 2013, it was found that radiologists only spend 36.4% of their time on image interpretation, with 43.8% of their time being spent on noninterpretive tasks (e.g., protocolling requisitions, supervising and monitoring studies, performing image-guided procedures, consulting with physicians, caring for patients).<sup>1</sup>





Given the variety of imaging modality manufacturers and scanners, naming conventions, and terminology standards (e.g., ICD, SNOMED, etc.) used in the market, an automated method to appropriately display and hang radiology studies can be a difficult task.<sup>2</sup> Hanging protocol efficiencies are something that greatly helps radiologists, as they can begin interpretation right away with optimized settings and layout. When the radiologist can't perform the interpretation timely, such as if hanging protocols are not configured, downstream implications occur, such as lower potential volume of reads in the workday, and longer study turnaround time (TAT).

## Supporting Radiologists via Effective Data Management Practices

Radiologists are important members of the patient care team and are growing in influence on the development of organizational strategies to improve processes, lower costs, and ensure patient satisfaction and safety.<sup>3</sup> Imperatives radiologists focus on today as they seek to deliver the best care possible, include bettering workflow, using integrated applications versus legacy closed systems, and having greater patient case context (e.g., patient history, prior images) ready when reading to improve findings and results.

While image quality has long been a concern for radiologists, their organization's data management is now as well, as it plays a foundational role in enabling many of the other technology-oriented processes and experiences they are looking for so they can perform at the top of their license and abilities.

When institutions have in place the right approach to imaging data management, radiologist workflow, and work experiences are improved, as well as impact on the patient care plan through scenarios including:

- Consistent correct hanging protocols
- More informed reading foundation, including relevant priors alignment
- Standardized naming ontology and terminology
- Automated processes such as dictation templates correctly populate
- Improved reporting



Through the use of AI, a more intelligent approach to data management can be deployed, overcoming challenges and aligning to the imperatives of radiologists for their work experience. Providers must ask themselves whether the organization has the right imaging data management approach to optimize workflow and give radiologists more time to focus on image reading and interpretation for clinical case impact.

## Conclusion

With clean, standardized, and quality imaging data, radiologists can benefit from improvements to workflow, daily work experience, and greater engagement. By effectively addressing data standardization, radiologists can operate at the top of their license, yielding the best outcomes for themselves, their organizations, and their patients.



## Sources

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