

## **EDITORIAL**

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# **Structured Reporting: Faster, Better, Smarter**

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### **Introduction:**

Over the past few decades, traditional radiology reports have been facing great challenges. Radiologists and clinicians agreed that free text radiology reports not only take a long time to create but also contain a large number of confusing words or phrases and inconsistent language order, thereby reducing the readability of the reports<sup>1</sup>. Therefore, the field of radiology has always emphasized the importance of structured reporting<sup>2,3,4</sup>. Numerous studies have shown its significant role in facilitating communication among radiologists and promoting collaboration between medical institutions<sup>5,6</sup>. Additionally, the application of structured reporting contributes efficient data transmission and extraction. Despite numerous potential benefits and technical feasibility, the adoption of structured reporting in some countries has remained lukewarm to date.

Radiology reports are often lengthy and unstructured, posing challenges for referring physicians in quickly identify critical imaging findings while increasing the risk of missed information<sup>5</sup>.

### **Definition of structured reporting:**

Weiss et al. describe three levels of structured reporting<sup>6</sup>:

1. The first level is a structured format with paragraphs and subheadings. Currently, almost all radiology reports contain this structure, with sections for clinical information, the examination protocol, radiological findings and a conclusion to highlight the most important findings.
2. The second level refers to consistent organization. For example, a knee MRI describes all relevant anatomic regions such

as cruciate ligaments, menisci, collateral ligaments, and so on, with an internal logical order.

3. The third level directly addresses the consistent use of dedicated terminology, namely standard language. To increase the accessibility and reusability of radiology reports, defined terms of a standardized lexicon should be used.

### **Reasons for structured reporting:**

The main functional needs for moving from traditional free text reporting to standardized and structured reporting can be addressed under three categories: quality, datafication or quantification and accessibility<sup>7</sup>.

### **Benefits of Structured Reporting:**

- Rapid report turnaround time,
- Reduced reporting costs,
- Improved communication,
- More satisfied referring providers, and
- Simplified quality and compliance reporting.

### **Summary:**

Wide adoption of structured reporting is of critical importance for providing referring physicians and ultimately patients with the best quality of service, for assessment of radiology's contribution and fair recognition of radiology in value-based medicine and for providing researchers with the best quality data in the context of big data exploitation of available clinical data.

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