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Perspective

Communication among Physicians and Allied Healthcare Associates: Precise Radiology Reports–Minimizing Complications, Maximizing Outcomes

Nicholas A Kerna[1,2*]

[1]*College of Medicine, University of Science, Arts and Technology, Montserrat, BWI*
[2]*Department of Radiology, Suriwongse Medical Center, Thailand*

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***Corresponding author**

Nicholas A Kerna, College of Medicine, University of Science, Arts and Technology, USA, Email: nicholas.kerna@usat.edu

Introduction

The Purpose of a Standardized Radiology Report Format

The radiology report is one of the most vital diagnostic tools available to the physician. Therefore, the radiology report should be written in a consistent format containing basic, but necessary and essential, information. The report must include not only the findings and the interpretation of findings but also information about the imaging facility, and any specifics or peculiarities of circumstances, positioning or limitations in the technique. Standardized formatting, particularly for repeat or follow-up procedures, is fundamental and critical for diagnosis and prognosis and progress reports. Uniform radiology reports aid in determining an accurate diagnosis for optimal treatment outcome. Also, a proper radiology report projects a professional image that promotes acceptance and confidence among associates, peers, and patients.

Discussion

Information Contained in a Radiology Report

Keep in mind, radiology reports should be typed, not hand-written. Introductory information should include the following:

- Imaging facility letterhead
- Imagining facility name, address, contact numbers, and email
- Name of the reporting physician
- Patient information (including name, date of birth, age, sex, and record identification number)
- Radiographic views taken
- Date radiographs taken
- Technique factors (optional but suggested)
- If any unrequested views were needed and taken, state the reason for doing so, such as "spot view of L4/L5 taken as patient is obese" or "patient had difficulty maintaining proper imaging position".
- Note any devices on the patient, such as splints, supports or casts.
- Note any artifacts on the radiographs, such as jewelry, hairpins or implants.
- Note anything exceptional or out of the ordinary.

If the imaging facility does not have a report template, it is advised to download or create such. Next to following in the x-ray report:

- The patient's chief complaint
- Specific clinical and applicable examination findings (as provided by the primary/referring physician)
- State the reason for the study (as reported by the primary/referring physician).

Distinguishing Information Contained in a Radiology Report

Following the aforementioned items should be the imaging findings written in narrative form including an impression or conclusion section; and, if applicable, recommendations for further imaging studies or testing. Finally, the wet signature or electronic signature of the physician writing the report should be applied.

The Style of the Radiology Report

The writing of the report should be clear and legible. It should contain proper spelling and punctuation, and utilize correct and accepted medical terminology; the report should also be well-formatted. Structural errors (such as awkward grammar or sloppy formatting) may lead to a misunderstanding of findings or may cause a loss of confidence by the requesting physician. Any resultant doubt may cause the requesting physician to overlook or disregard some otherwise significant findings, or to give the findings less credence. To create doubt in the mind of the physician complicates the physician's task at hand of accurately diagnosing and treating the patient. The x-ray report should contribute to the patient's proper evaluation and treatment, not detract from it.

The x-ray report should be in a standardized (same) format every time (especially for follow-up views of the same area to facilitate and complement comparison).

Utilization and Limitations of the X-Ray Report: Reminder to Primary/Referring Physicians

It is important to note that x-rays (x-ray report findings) are not a substitute for a proper and thorough patient history and examination; rather, they are contributive to the overall evaluation. X-rays are just one of the diagnostic tools to assess a patient's clinical presentation. X-rays should not be considered nor used as the sole source from which a diagnosis is made.

Regarding Other Imaging Modalities

The provisions outlined above are also applicable to reports written regarding other medical imaging techniques, such as CT scan, MRI, Ultrasound, Echocardiography, and others.

Conclusion

Well-Written is Well-Communicated for the Well-Being of the Patient

Radiographs (and their reports) are the oldest and most common imaging techniques in the diagnosis of a patient's condition. Interpreting x-rays and writing radiology reports is specialized and demands concentration, clarity, and precision. The reports should consistently contain all of the information mentioned above. The narrative, conclusion, and impression sections should be well-formed and well-written. Following this format will improve communication thus minimizing the potential for errors that could lead to iatrogenic (physician-caused) complications and maximizing optimal outcomes of treatment. The reading of x-rays and writing of x-ray reports is repetitive and can be, at times, tedious. Therefore, it should be kept in mind at all times that the accurate conveyance and communication of radiology findings (through clear and consistent radiology reports) is being done for the benefit and welfare of the patient.

Conflict of Interest Statement

The author declares that this paper was written in the absence of any commercial or financial relationship that could be construed as a potential conflict of interest.

References

1. Italia GR. Radiology Report Writing. California X-ray Technology Course. Online CE sponsored by the University of Bridgeport. Access available by fee to healthcare professionals. 2013.

2. Wilcox JR. The written radiology report. Applied Radiology, The Journal of Practical Medical Imaging and Management. Appl Radiol. 2006.