Validation of Macro Button Toolbar System for Radiology Report Composition

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Introduction
The continued increase in imaging volume, decreases in payer reimbursements, and a declining radiologist workforce (Henderson, 2022) (Fleishon, 2022) (Maskell, 2022) necessitated the development of a faster way to compose high quality reports.

Toolbar System
- Interactive toolbars contain macro buttons that deposit text from reference guidelines straight to the report template.
- Reference toolbars include buttons for quick access to images and information radiologists need to complete the report.
- The goal of the toolbar system for report composition is to speed up report turnaround time while also improving quality and reducing radiologist fatigue.

Methods
- Daily work RVU for 8 full-time radiologists was compiled from an 18-month time frame spanning January 2022 through June 2023.
- Information for 404 complete reports was collected from eight unique radiologists.
- Observed radiologists were categorized into three groups based on their toolbar usage: low, moderate, and high users. The categorization was done based on the methodology of completing an X-ray report.

Results
- 29% increase in radiologist wRVU productivity with high usage of an advanced macro-toolbar template tool.
- 52.6% decrease in X-ray report completion time with high usage of advanced macro-button templates.

Big Idea:
High usage of macro button toolbar system over voice recognition for radiology report composition improves radiologist productivity.

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References

Report Completion Time for XR Exams

Chart 1: Comparison of report completion time between radiologist toolbar usage groups

Daily wRVUs (Jan 2022 – June 2023)

Chart 2: Comparison of daily wRVU productivity between radiologist toolbar usage groups