

## 67 Improving Emergency Department Documentation and Subsequent Billing by Rotating Residents through a Brief Online Teaching Module

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**Background:** We made improvements to documentation in our emergency department (ED) with long term projects, but this approach cannot work with rotators - residents of other specialties who work in our department for 2-4 weeks. In their brief time in the ED, rotators learn new clinical skills, a new environment, and a new computer system. Thus, an already overwhelmed trainee has limited time to learn ED-specific documentation.

**Objective:** A brief, self-administered online teaching module and quiz can increase documentation quality of ED rotators, leading to improvements in coding and billing.

**Methods:** A retrospective study was performed at a high-volume urban academic tertiary care center. Before rotating in the ED, rotators received an e-mail with a brief PDF review of basic ED documentation and a link to a mandatory online 10-question quiz.

The intervention was implemented in December 2011. Data was obtained from the coding department for August 2011 and March 2012. The average relative value units (RVU) per patient of rotators- charts were compared before and after intervention.

A follow up study measured rotators- retention of proper documentation by having them complete the same quiz at least six months after their rotation.

**Results:** For rotators' charts, the average RVU per patient was 3.06 pre-implementation and 3.23 post-implementation - an absolute increase of 0.17 RVU per patient (5.43% relative increase). Figure 1 compares the distribution of chart levels pre- and post-intervention. Assuming \$35 per RVU reimbursement (Medicare average), we estimate an annual revenue increase of \$47,285 based on our patient volume. Figure 2 reveals good retention of information with over 50% of questions answered correctly.

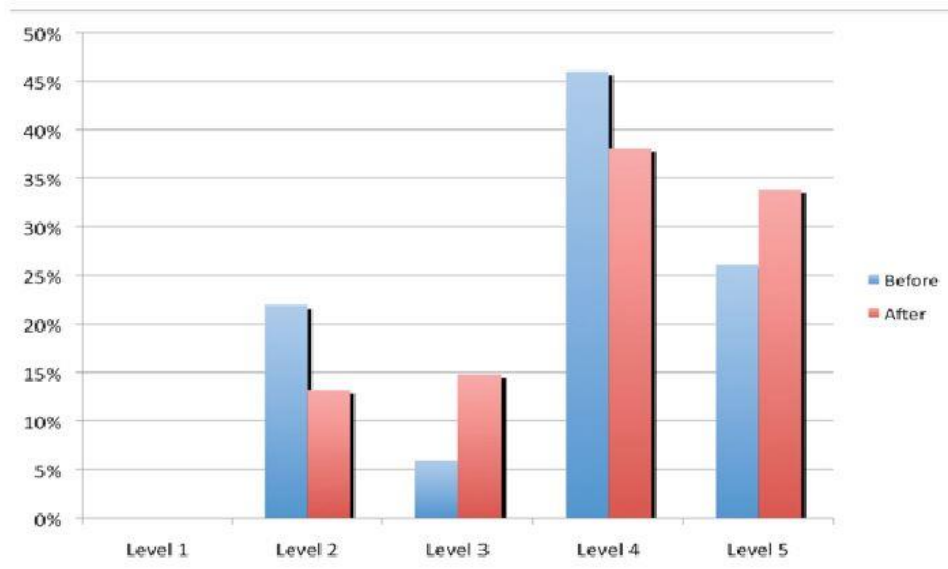
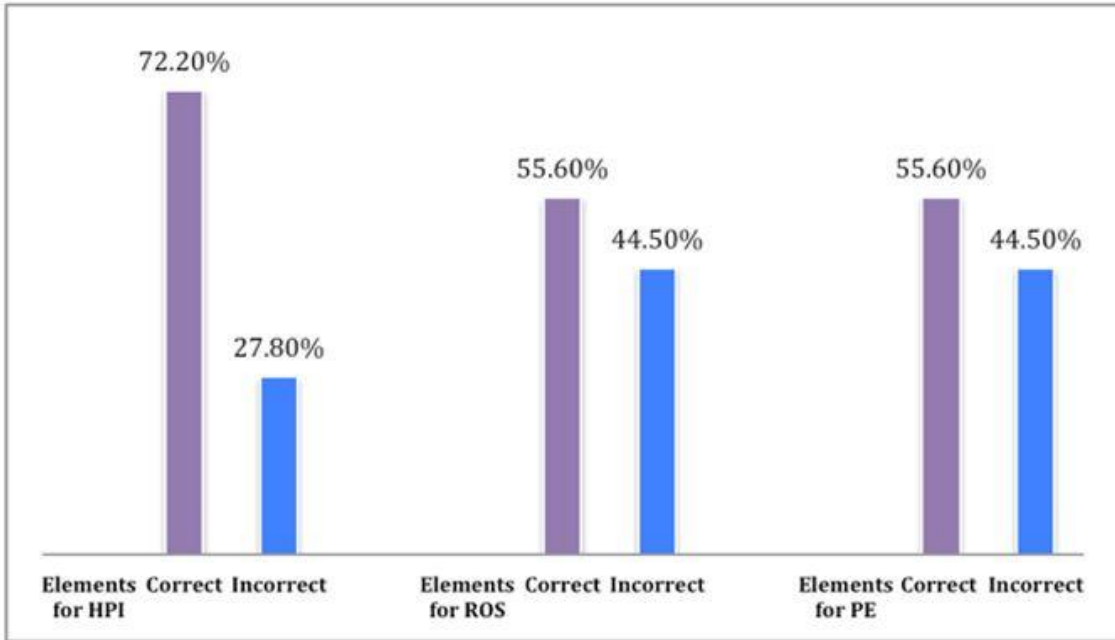


Figure 1. Distribution of chart levels pre- and post-intervention.



**Figure 2.** Improved retention with >50% of questions answered correctly.

**Conclusion:** A brief online teaching module and quiz is effective at improving rotating resident documentation and increasing billing from rotator charts by more than 5% on average for a total potential increase in collections of close to \$50,000.