

SYNOPSIS

- Resident billing performance can have significant financial implications for the academic institutions employing them
- To assess the impact of newly implemented medical coding lectures and a modified note template on resident billing accuracy, resident billing accuracy from the pre- and post-intervention periods were compared
- Billing lectures and a modified note template yielded a clear improvement on resident billing accuracy at our institution

METHODS

- All CPT codes and modifiers were recorded for approximately 256 patient encounters before and after our intervention.
- The intervention consisted of four monthly billing lectures with two associated quizzes as well as a note template designed by author MT that automatically lists the correct procedural codes according to the numbers and types of procedures chosen from a dropdown list
- Billing accuracy was verified by two attending dermatologists through chart review and compared between the two time periods

RESULTS

- Billing data from 513 patient visits, 257 from the pre-intervention period and 256 from the post-intervention period, were checked for accuracy
- The accuracy of resident-billed E/M levels of service was similar between pre- and post-intervention (44.4% vs. 44.8%)
- Similar rates of undercoding and overcoding were noted between the pre- and post-intervention periods (35.4% undercoded and 8.1% overcoded vs. 35.8% and 8.9%).
- Substantial improvements were noted in the rate of errors with procedural codes and modifiers in the post-intervention period
- 22.0% of procedural codes were incorrectly billed pre-intervention while only 3.7% were incorrectly billed post-intervention ($p < 0.05$).
- 55.2% of modifiers were incorrectly billed pre-intervention while only 27.3% were incorrectly billed post-intervention ($p < 0.05$).

Figure 1: Breakdown of the percentage of undercoded and overcoded E/M codes in the pre- and post-intervention periods.

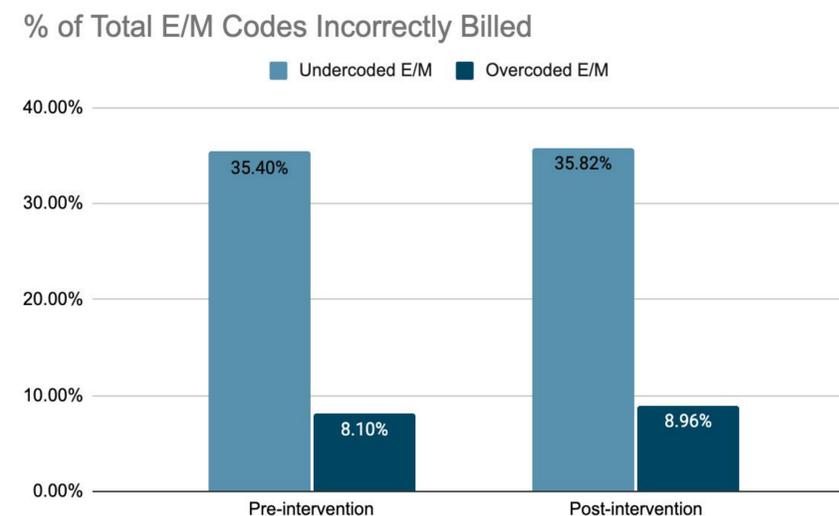
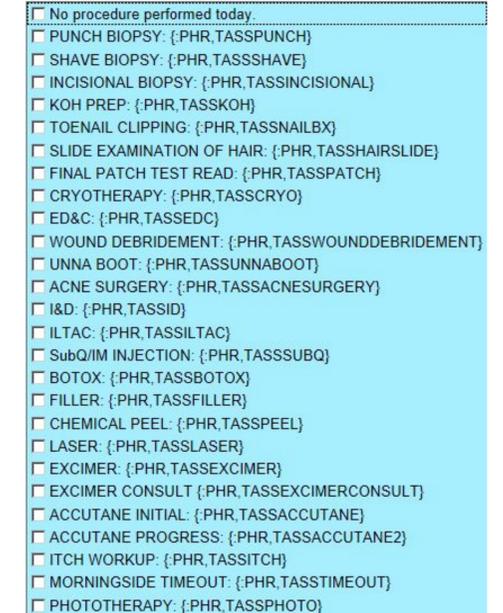
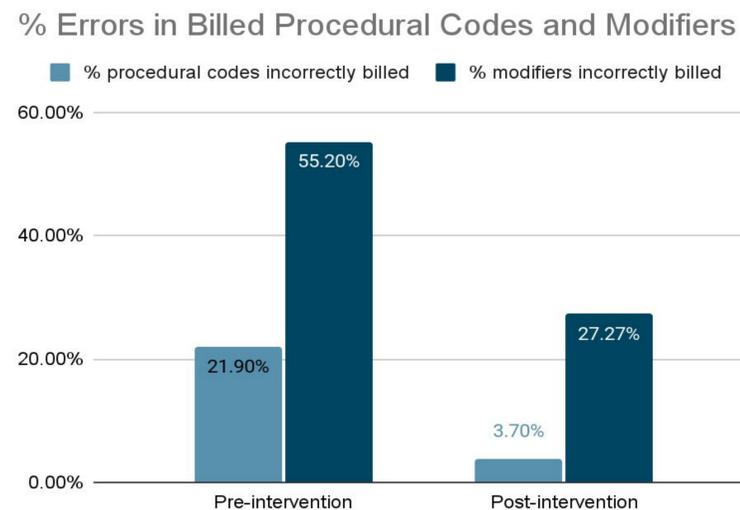


Figure 2: Percentage of total procedural codes and modifiers that were incorrectly billed in the pre- and post-intervention periods.



CRYOSURGERY:
 Number of lesions treated: ***
 Location of lesions treated: ***
 Procedure: Liquid nitrogen applied to lesion(s) for *** seconds, for *** freeze-thaw cycles.
 Complications: None.

CPT Codes:
 Premalignant: 17000 for 1, also add 17003 for 2-14 (units = number of lesions).
 17004 used alone for 15+ (units = 1).
 Benign: 17110 for 1-14, 17111 for 15+ (units = 1 for both)

CONCLUSIONS

- Lectures on medical coding and a template that automatically lists the CPT codes for procedures greatly improved the billing accuracy of dermatology residents at our institution, significantly decreasing the rate of errors for procedural codes and modifiers
- Residents consistently undercoded E/M rather than the opposite, perhaps due to a perception that there is no meaningful benefit to maximizing their billing
- Our lectures seemed to be most impactful on procedural codes and modifiers