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Impact of Medical Students Notes on Emergency Department Billing

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Table 1. Impact of the change to a four-year program on academic or leadership position and scholarly output, OR (95% CI).

	Academic position*	Peer reviewed publication at graduation	Peer reviewed publication, one year post-graduation	Leadership position**	Publications & presentations	Academic position excluding fellowship	Peer reviewed publication at 48 months†
Four-year program	2.14 (0.72-6.32)	3.86 (2.06-7.23)	8.79 (2.37-32.62)	12.65 (2.02-79.36)	8.51 (2.28-31.78)	3.32 (0.94-11.71)	3.24 (1.44-7.30)
Advanced degree	4.31 (1.60-11.60)	2.45 (0.72-8.28)	3.55 (0.87-14.42)	3.48 (1.16-10.44)	1.06 (0.29-3.82)	3.29 (1.23-8.80)	2.84 (0.84-9.62)
USMLE Step 1§	1.03 (0.99-1.07)	1.00 (0.98-1.02)	0.98 (0.96-1.01)	-	1.03 (0.98-1.07)	1.02 (0.99-1.05)	1.00 (0.98-1.03)
Female	1.62 (0.59-4.44)	1.91 (0.94-3.88)	1.62 (0.69-3.81)	2.28 (0.93-5.60)	0.36 (0.07-1.82)	2.08 (0.76-5.71)	1.75 (0.85-3.61)
N	92	92	92	92	81	92	92

All data stated as odds ratios with 95% confidence interval (in parentheses). ** USMLE was collinear with four-year program and so was dropped; † Compares publication at graduation for four-year program and one year after graduation for three-year program; §USMLE, United States Medical Licensing Examination; OR, odds ratio; CI, confidence interval.

3 Impact of Medical Students Notes on Emergency Department Billing

Trinco D, Takacs M, Bailey O, Bobb Swanson M, Harland K, Obr B / University of Iowa Hospital and Clinics; University of Iowa

Background: On 2/2/18, the Centers for Medicare and Medicaid Services (CMS) announced a revision allowing teaching physicians to use student documentation for billing if the teaching physician verifies the documentation. There is limited data on the efficacy of medical students notes used in billing for Emergency Medicine. While more institutions are permitting billable medical student notes, the effects have not been studied.

Objectives: The aim of the study is to compare the change in Emergency Department efficiency, measured in relative value units (RVUs), when notes were written by medical student (2019) compared to resident/attending (2018). We predict medical student notes are as effective or superior to resident or attending physician notes. A secondary aim is to determine whether the number of notes written by medical students has changed. To understand the impact of the Centers for Medicare and Medicaid Services rule change allowing medical students notes to be used for Emergency Department billing

Methods: This project is a retrospective before-after study in the ED of a tertiary teaching university. Notes with medical student authors were identified for the pre (3/2018-5/2018) and post (3/2019-5/2019) periods. This time period was selected as our institution adopted the CMS policy for utilizing the medical student note for billing in 01/2019. Outcomes included RVUs per note and number of notes written per medical student. Wilcoxon rank sum tests and generalized estimating equations clustered on note author assessed for pre-post differences in note quality (RVU) and quantity.

Results: After the intervention, there was a 0.32 increase (95%CI 0.13 to 0.51, p=0.001) in RVUs per note compared to before the intervention. Number of notes written per medical

student was higher in the post-intervention group (median 51 notes [IQR: 42-57]) compared to the pre-intervention group (median 7 notes [IQR: 3-8.5])(p<0.001).

Conclusions: Medical student notes result in higher RVU totals after the CMS revision. Medical students wrote more notes when they were used for billing.

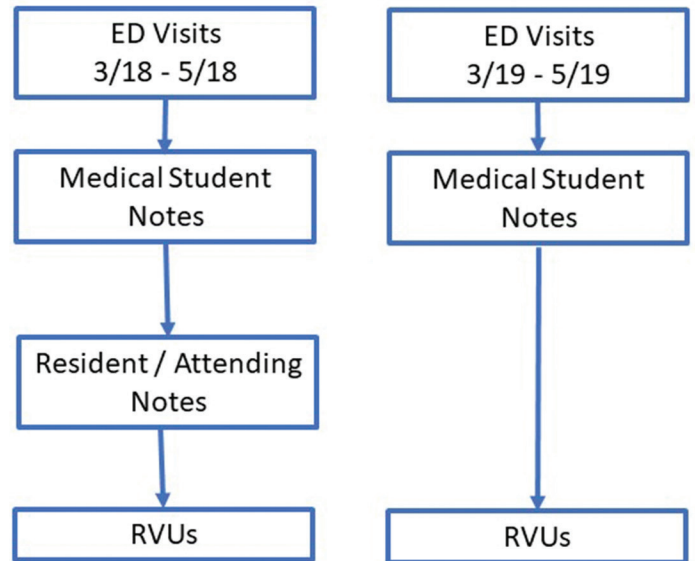


Figure 1.

4 Implementation of a Modified NCAT-EM shift card on Completion Rates of Assessments by Faculty in an Emergency Medicine Clerkship

Schlein S / University of Vermont

Background: One of the biggest challenges facing Emergency Medicine (EM) Clerkship Directors is acquiring meaningful clinical assessments from the faculty. Both at our institution and nationally return rates have been as low as 20% (Lawson eval). We created a modified NCAT-EM shift card that combines a validated nationally standardized tool in EM with a traditional shift card with which students themselves fill in patient initials, chief complaints, comments and procedures with a goal that this would inspire quality formative feedback and motivate improved compliance.

Objectives: Improve completion rates by using a new tool, a modified NCAT-EM shift card that combines a validated nationally standardized tool in EM with a traditional shift card. The primary objective in this study is to determine the impact of implementation a new EM Clerkship shift evaluation tool in an EM Clerkship. We aim to identify improvements in compliance rates as well as quality of data using the new tool in comparison to the prior electronic platform.

Methods: We reviewed data over 24 months in the pre-implementation period to determine a baseline. We present