

## **UC Irvine**

### **Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health**

#### **Title**

Billing and Coding Shift in an EM Residency: A Win-Win-Win Proposition

#### **Permalink**

<https://escholarship.org/uc/item/7f99p0x7>

#### **Journal**

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 17(4.1)

#### **ISSN**

1936-900X

#### **Authors**

Takacs, Michael  
Stilley, Joshua

#### **Publication Date**

2016

#### **Copyright Information**

Copyright 2016 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

**Background:** Error disclosure is a critical skill for emergency medicine resident’s professional development. When an error occurs, critical steps in addressing the error include: acknowledging to the patient that an error occurred, discussing the clinical relevance of the error, addressing systems based issues that allowed the error to occur, steps taken to prevent future errors, and finally an apology by the provider to those involved.

**Educational Objectives:** To assess our current curriculum in error disclosure and to create changes to the curriculum if necessary.

**Curricular Design:** Our current curriculum includes hospital based and residency based activities. Residents attend a mandatory medical center presentation on error disclosure; residency based small group discussions and individualized clinical experiences. We assessed the ability of our residents to apply the principle learned to a case based scenario that included multiple errors (omission and commission). Their answers were evaluated against a predetermined checklist of key principles in standard error disclosure. We compiled the results to evaluate areas for curricular improvement.

**Impact/Effectiveness:** 32 residents completed the assessment. 100% of residents acknowledged the error of commission (32/32), 34% of the residents did not recognize the error of omission (11/32). 31% did not explain the relevance of the error to the patient (10/32). 50% of the residents did not explain why the system allowed for the error (16/32). 15% did not describe how future errors would be prevented and 15% did not complete the critical step of apology (5/32).

This data emphasized that our current curriculum requires improvement. In addition, residents have knowledge gaps in error disclosure, particularly in identifying and managing errors of omission and explaining why errors occur. Future goals will be to augment the medical center based curriculum with an EM focused case based discussion of error disclosure principles. Cases will focus on language that support discussion of systems based errors with patients. The value and need for apology will be emphasized.

## 21 Billing and Coding Shift in an EM Residency: A Win-Win-Win Proposition

Takacs M, Stilley J / University of Iowa, Iowa City, IA

**Background:** Effective teaching of billing and coding has been well known to be deficient in emergency medicine (EM) residencies.

**Educational Objectives:** Our primary objective was to create an effective teaching method for billing and coding education in an emergency medicine residency via an inter-professional shift in our billing and coding office. Secondary

objectives were to improve the efficiency and job satisfaction of our billers and coders and potentially to increase revenue in the department.

**Curricular Design:** We conducted a one-on-one inter-professional workshop with our lead coder. From September, 2014 to April, 2015 and during their EM 4 week rotation at the University of Iowa Hospital, one resident from each class was asked to sign up for a billing and coding shift between days 11 and 18 of their 28 day rotation. The lead coder worked individually with each resident providing a one hour interactive lecture, followed by a 1-2 hour exercise of residents coding a set of standardized charts followed by a feedback session of their performance on coding. We surveyed the residents within the week after their workshop as to the quality of this experience as a measure of our primary objective. We surveyed the coders in April, 2015 as a measure of our secondary objectives.

**Impact/Effectiveness:** 26 of 26 emergency medicine residents (100%) completed the inter-professional workshop and 19 of 26 residents (73%) completed the post-workshop self-assessment survey. A paired t-test on a 5 point scale comparing knowledge gained before and after the workshop showed an improvement from 3.3 to 4.3,  $t = -6.18$ ,  $p < 0.001$ . Results of resident surveys are displayed in Table 1. Coders also were surveyed on a 5 point Likert scale with results in Table 2.

**Table 1.**

Resident Survey Question	Likert Scale	Mean	SD
Gained a significant amount of knowledge	5	4.21	0.54
Found it beneficial	5	4.39	0.59
Would change my clinical practice	5	4.26	0.81
Overall satisfaction with practice	7	6.16	0.60
Length of time was just right	3	2.16	0.37

**Table 2.**

Coder Survey Question	Mean	SD
Coders see consistent documentation of required elements	4.25	0.50
Identify that good documentation from prior year	5.00	0.00
Have seen improvement in documentaion	4.50	0.58
Note an increase in job satisfaction with well written notes	5.00	0.00
Able to process more charts with good documentation	5.00	0.00
Estimate of efficiency increase due to good documentation	38%	42%