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Effects of Wellness Credits on Resident Physician Burnout

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studies. Limitations include convenience sampling and that the gamification session was held in addition to the standard curriculum which includes cardiology and pulmonology.

## 14 Does Inclusion of Residents in EKG screening in the ED change the Time to Catheterization Lab Activation?

Sarah Aly, Kelsey Coolahan, Kirk Tomlinson, Duncan Grossman, Joseph Bove, Steven Hochman

**Background:** A significant amount of research has gone into EKG interpretation training modalities for emergency medicine residents, but few high-powered studies exploring the accuracy of resident EKG interpretation exist.

**Objectives:** This study aims to evaluate whether or not the inclusion of PGY-3 EKG interpretations is non-inferior to attending-only EKG interpretations in regards to timely STEMI activation.

**Methods:** This is a retrospective non-inferiority study of STEMI activation times before and after the inclusion of PGY-3 resident EKG interpretations performed at an academic, urban tertiary care center between November 2020 and April 2022, excluding pre-hospital activations. The primary endpoint is the proportion of STEMI activations within five minutes of EKG completion; time window chosen to account for operator delay. An absolute decrease of 10% between before and after inclusion of resident EKG interpretations was chosen as the non-inferiority margin.

**Results:** 39 STEMI activations occurred from November 2020 to July 2021 prior to resident inclusion in the reading of EKGs. 40 STEMI activations occurred from August 2021 to April 2022 after resident inclusion. In the attending-only period, 26 (66.7%) cases resulted in STEMI activation within 5 minutes of the initial EKG being obtained compared to 31 cases (77.5%) in the post-resident period. The absolute difference between groups' successful activations shows an increase of 11%, which lies within the non-inferiority margin (delta +11%, 95% CI

-8.68%, 30.7%). The proportion of STEMI activations within 5 minutes did not differ by resident reading,  $X^2 = 1.15$ ,  $p = 0.28$ .

**Conclusion:** Based on our data, we can conclude that including Emergency Medicine PGY-3 residents in reading EKGs is non-inferior to attending-only interpretation of EKGs with regard to STEMI activation time.

## 15 Effects of Wellness Credits on Resident Physician Burnout

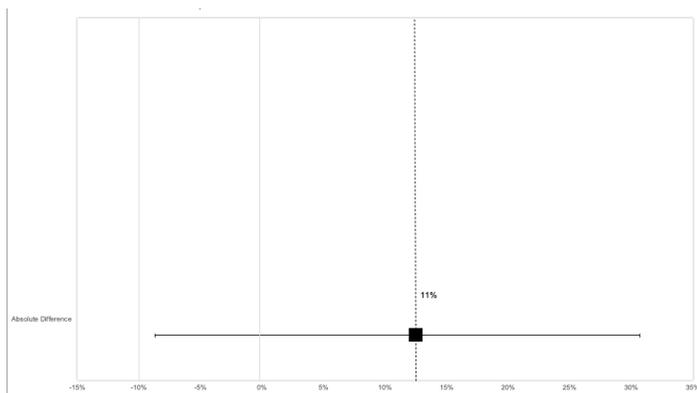
Kirlos Haroun, Sandra Coker, Paul Kukulski, Adriana Olson, Navneet Cheema, Zayir Malik, James Ahn

**Background:** There is extensive literature on physician burnout showing that it correlates with individual mental and physical illness, leads to adverse patient outcomes, and is financially costly to health systems. Further, understanding physician burnout is a step towards improving physician wellness. Investments in physician wellness nationwide have occurred in a broad assortment of ways; however the literature does not present wellness funds to residents as a previously studied approach.

**Objective:** Our goal was to study the impact of wellness credits on resident burnout and assess residents' overall perspective of the intervention on their daily wellness. We hypothesize a decrease in burnout and an overall positive assessment of the program by involved residents.

**Methods:** In the Fall of 2021, the University of Chicago EM Residency program began to give financial stipends during the most difficult rotations as a novel approach to mitigating resident burnout. This was a quasi-experimental, prospective study investigating the impact of stipends on EM resident burnout. Following the intervention, a post-intervention survey was sent to residents to assess perspectives on the initiative.

**Results:** 36/49 residents (73%) responded to the survey. Over half of residents "often" or "always" (42%, 8%, respectively) had difficulty completing daily chores, and 72% of residents used more than half or all of the gift cards for such chores. In turn, 74% of residents "agree" or "strongly agree" that the initiative benefits their overall wellness." Finally, 100% of respondents would like to see the initiative continue.



**Figure.** Difference in proportion of successful STEMI activations post- and pre- resident inclusion.

**Table.**

Survey Question	Survey Response	Response Rate	Percentage
In the last academic year (2021-2022), how often have you experienced difficulty completing daily chores and/or fulfilling housekeeping requirements? (i.e. cleaning, walking pets, dry cleaning, meal preparation, meal/grocery delivery, etc.	Sometimes	14/36	39%
	Often	15/36	42%
	Always	3/36	8%
How much of the gift card did you intend to use for the items referenced above?	More than half or All	26/36	72%
The financial value provided by the Wellness Gift Card was adequate to support the items referenced above	Agree or Strongly agree	12/35	34%
My overall wellness benefited from the Wellness Gift Card initiative	Agree or Strongly Agree	26/35	74%
Would you like to see the Wellness Gift Card continued into the next academic year?	Yes	36/36	100%

**Conclusions:** All respondents felt that the gift card initiative should continue; the majority of residents used this help with daily chores that they had difficulty fulfilling. Further, residents reported an increase in wellness after this initiative. We plan on investigating this intervention in relation to individuals' Maslach Burnout Inventory.

## 16 Effect of Provider Level on Bounceback Rate and Patient Prognosis in the Emergency Department

*Katherine Chen, Marco Lorico-Rappa, Caroline Runco, Alberto Hazan, Saira Mehmood, Patrick Olivieri*

**Background:** Emergency Medicine providers have a limited time frame to decide whether patients can be safely discharged home or if they require inpatient hospitalization for further management. Some patients who are discharged home return unexpectedly to the ED within a short time period of their initial visit. These return visits are categorized as bouncebacks. For our quality-of-care measurement we utilized bouncebacks that ultimately require hospital admission, as we believe this serves as a better indicator than bounceback rates alone.

**Objective:** The primary objective of this study was to determine if the composition of the initial visit provider team was associated with a difference in 72-hour bounceback admission rates and 72-hour bounceback cardiac arrests.

**Methods:** Initial visit provider teams consisted of an attending physician alone or as a team with a resident physician. We conducted a retrospective cohort study of arrests. Initial visit provider teams consisted of an attending physician alone or as a team with a resident physician. We conducted a retrospective cohort study of Emergency Department visits between August 1, 2020, and August 1, 2021. Data was extracted from six community hospitals and categorized by provider and disposition. **Results:** Attendings saw 140,718 patients, with 1,207 bounceback admissions (0.86%), which was a lower rate than attending and resident teams, who saw 10,428 patients and had 153 bounceback admissions (1.47%;  $X^2 = 39.8, p < .001$ ). Attendings saw 14 (.001%) bouncebacks due to cardiac arrest, which was not statistically different from the bounceback rate due to cardiac arrest from teams of attendings and residents (1 bounceback; .009%;  $X^2 = 0.00, p = 1.000$ ).

**Table 1.** Bounceback admission rates based on provider level.

Provider Level	Admitted	p-value
Attending	1,207/139,511 (0.86%)	0.921
Attending/APP	1,036/127,718 (0.80%)	0.007
Attending/Resident	153/10,275 (1.47%)	<.001

**Table 2.** Bouncebacks admitted with cardiac arrest based on provider level.

Provider Level	Admitted	p-value
Attending	14/140,718 (0.01%)	0.138
Attending/APP	7/128,754 (0.01%)	0.278
Attending/Resident	1/10,428 (0.00%)	

**Conclusion:** The severity of the clinical diagnosis was not considered in the analysis. Even though the bounceback admission rates are higher in the attending/resident team, our study suggests that this team model is safe and can help foster a clinical learning environment, as long as patient-centered care is emphasized.

## 17 Emergency Medicine Resident Competency and Satisfaction After Implementing a Standardized Radiology Curriculum, a Prospective Study

*Gary Cook, Christopher Reilly, Priscilla Cruz*

**Background:** Currently, there is no radiology curriculum adopted by an ACGME accredited Emergency Medicine (EM) residency program, nor does the ACGME define specific outcomes regarding image interpretation and application. Studies have shown EM residencies are lacking formal radiology training. Thus, EM residents may not feel prepared to interpret images and make clinical decisions based on that imaging without a radiologist's interpretation. This study attempts to add to the limited amount of literature in regard to radiology education within EM residencies.

**Objectives:** We hypothesized that if an ACGME accredited EM residency program institutes a formal, standardized and brief lecture-style radiology curriculum, then those residents will show objective improvement in radiographic interpretation and subjective educational satisfaction and confidence in their ability to interpret imaging.

**Methods:** This was a single-center, blinded, prospective study performed at a community hospital. There were 28 EM residents followed over a four month study period from February to June 2022. Each week, the study investigators prepared and led brief, formalized radiology lectures. Prior to the start of the study, EM residents completed a formal assessment and survey. The same assessment and survey were then given at the end of the study period. This data was then analyzed using T-test statistical analysis.

**Results:** Of the 28 EM residents, 23 showed an improved assessment score. There was a 12% increase in