

## Automated Email Reminders Significantly Improve Faculty Compliance with Resident Evaluations

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**Introduction:** Providing consistent and timely clinical and professional feedback to residents during their training is essential for growth into independent practice and is an Accreditation Council for Graduate Medical Education requirement of faculty members. This feedback allows for real-time improvements and potential positive impacts on the next patient interaction. At Weill Cornell Medicine's Department of Anesthesiology, an evaluation platform is used to provide structured feedback to trainees in areas such as competence, professionalism, resource utilization, and readiness for independent practice. In our department, we initiated global daily paging reminders but compliance did not improve substantially. Therefore, we hypothesized that a more direct, individualized email service for faculty members would have the biggest impact on compliance of completing resident evaluations.

**Methods:** We analyzed data from June 14, 2015 to October 28, 2017 to assess the impact of two technological interventions on the completion of resident evaluations. Daily global paging reminders were initially inconsistent and therefore stopped on June 29, 2016 and were reinstated on February 17, 2017. A shift to individualized email reminders with an embedded link to evaluations began on June 15, 2017. A custom application generated daily emails to faculty who paired with residents in our anesthesia information management system (AIMS). Duplicate faculty/resident pairings on the same day were removed from the analysis, as the department expectation is to submit one daily resident evaluation. We conducted an interrupted time series analysis of weekly data to assess the effect of the interventions. In addition, we analyzed a subset of weekly data from February 19, 2017 to October 28, 2017 to assess the percentage change in compliance by individual attending among a population who logged cases in AIMS both before and after the email intervention. All analyses were conducted in Stata SE 15 (College Station, TX, USA).

**Results:** In the first week after the reinstatement of paging reminders, there was an estimated 12 percentage point increase in the percentage of AIMS cases with a completed evaluation (compliance), 95% CI: 4-19%,  $p < 0.01$ . In the first week after the institution of e-mail reminders, there was an estimated 19 percentage point increase in compliance, 95% CI: 10-27%,  $p < 0.01$ . Among a pool of 73 attendings who had completed cases both before and after the email intervention, 86% (63) had completed evaluations before. The intervention brought participation to 100% as 10 attendings (14%) completed evaluations for the first time. In addition, compliance by attending grew to 53% after the email intervention, up from 31% (a 71% relative increase,  $p < 0.01$ ).

**Conclusions**

Our individualized email service had a large impact on improving faculty completion of resident evaluations. As a result of the intervention, our department has a more accurate picture of resident performance because of the increased number of faculty participating in the evaluation process. One limitation of the study is the unclear expectation of evaluating a resident with whom a faculty member has worked with multiple times in one week. Further follow up on missed opportunities is needed to better understand the nuances of faculty thought process, time burden, and expectations. Similarly, technical improvements to the system as well as long term sustainability is essential.

**References:**

[https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/040\\_anesthesiology\\_2017-07-01.pdf](https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/040_anesthesiology_2017-07-01.pdf)