

Improving Residents' Response Time to Inbox Results

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Background

- Unlike most attending physicians, medicine residents are responsible for taking care of patients admitted to the hospital and outpatients simultaneously
- One study analyzed the efficiency and compliance of 41 residents at a large academic hospital with completing assigned outpatient tasks¹
 - No difference in compliance was found based on future career interest (primary care vs sub-specialty)
 - Residents were 68% compliant while on elective/ambulatory rotations and 45% compliant while on inpatient services ($p < 0.05$)

Study Aims

- We aimed to improve the response times to inbox results of the residents and interns at Jefferson Internal Medicine Associates. A standard measure in EPIC is the percentage of inbox results responded to within 24 hours. At the time of project initiation, **50% of all results assigned to resident and intern inboxes were being responded to in this time frame. We aimed to improve this number to 70%.**
- There is no expectation that residents and interns could respond to all results within 24 hours. Trainee schedules are very crowded, and not all inbox results need to be responded to that quickly.
- We did feel after analyzing this problem, though, that there was significant room for improvement.

Lab or image result appears in resident inbox

Resident takes action on result by calling, messaging, or forwarding to ancillary staff

Resident leaves "Result Note" describing their action

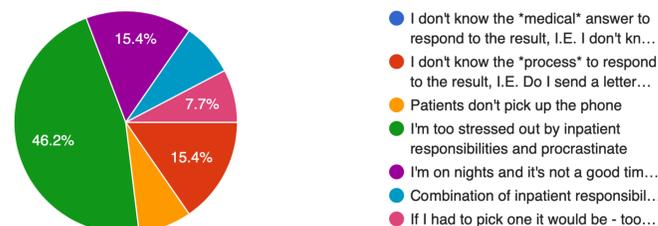
Resident clicks "Reviewed" or "Done," removing it from their inbox

Methods

- After a **survey of the residents and interns** at the clinic (see survey responses below), 2 major interventions were implemented, starting **December 1, 2018**:
 1. In the past, a **"taskmaster" in the office was responsible for addressing the results of residents on vacation.** We implemented a policy in which the taskmaster would additionally address the results of **residents on ICU and night shift rotations.**
 2. We began sending **monthly emails** letting the residents know of their improvement as a group and included one **"Tip of the Month" for improving response speed** (better utilization of ancillary staff, streamlining of workflow, etc.).

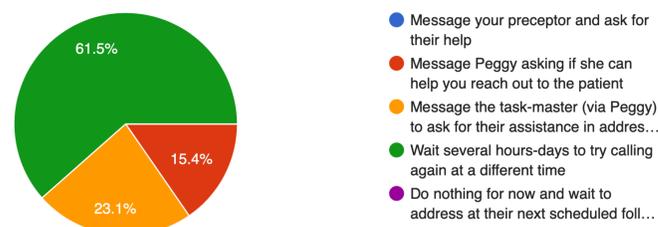
What is the #1 reason that you feel would prevent you from responding to a result in less than 24 hours?

13 responses



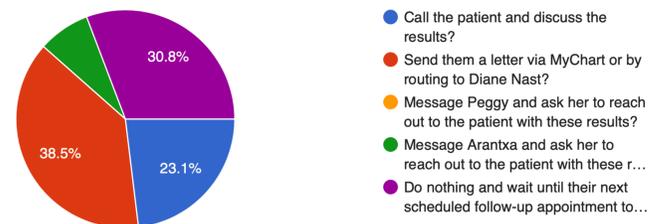
You get a result in your inbox that you know needs to be responded to in a timely manner. You're not able get the patient by phone. What do you do?

13 responses



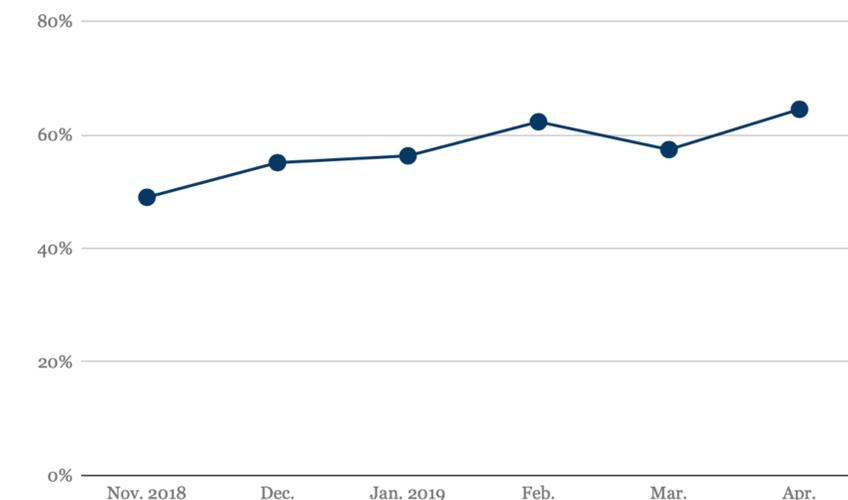
You get a result in your inbox, and you know that it is a low level result that not much needs to be done about, medically speaking. Are you more likely to:

13 responses



Results

- During the 5 months of this program, the number of resident and intern results that were addressed within 24 hours **improved from 50% to 64.5%.**



Conclusions

- Though we did not achieve our aim of 70%, we did improve response times substantially.
- This project **highlights 2 areas of improvement** for the resident ambulatory experience:
 1. **The impact of time-consuming or off-hour rotations** on response time of residents to outpatient tasks and the improvement in this metric that can be achieved if some of those responsibilities are delegated
 2. The **need for ongoing education** on inbox workflow rather than solely initial training during program residency orientation
- In the future, we should also consider polling patients on their satisfaction with their resident PCPs and how this satisfaction is effected by result response times.
- Another worthwhile consideration would be assessing/improving the efficiency of other inbox tasks, such as prescription refills, patient phone calls, and MyChart messages.

References

1. Leung V, Quigley L, Lam W, et al Clinical efficiency and resident education: a fine balance Postgraduate Medical Journal 2015;91:475-476.
2. Jason Hom, et al. "Fulfilling Outpatient Medicine Responsibilities during Internal Medicine Residency: a Quantitative Study of Housestaff Participation with between Visit Tasks." BMC Medical Education, BioMed Central, 10 May 2016, bmcmededuc.biomedcentral.com/articles/10.1186/s12909-016-0665-6.