

Do Incentives Work for Residency Patient Safety Education?

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Introduction

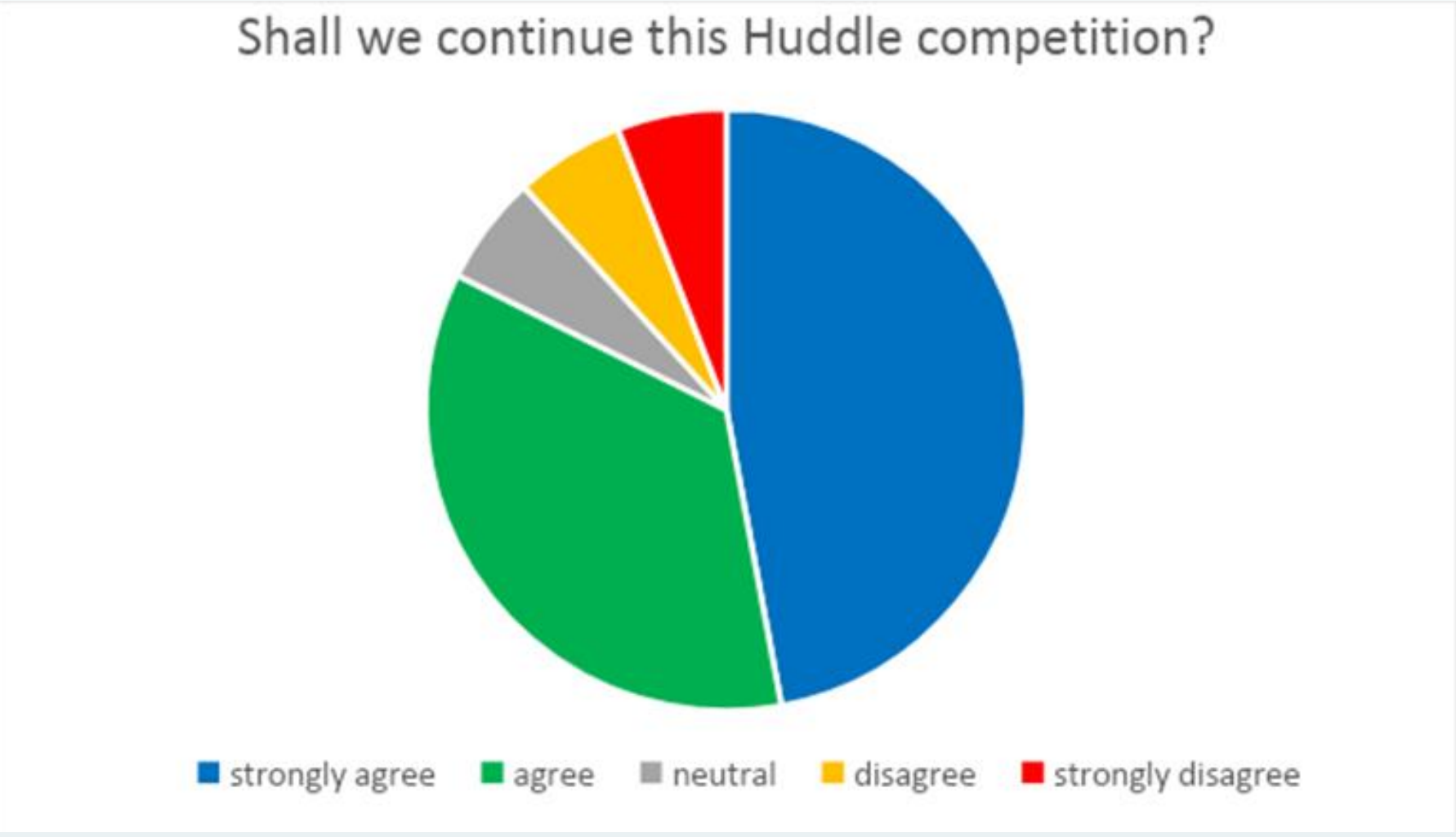
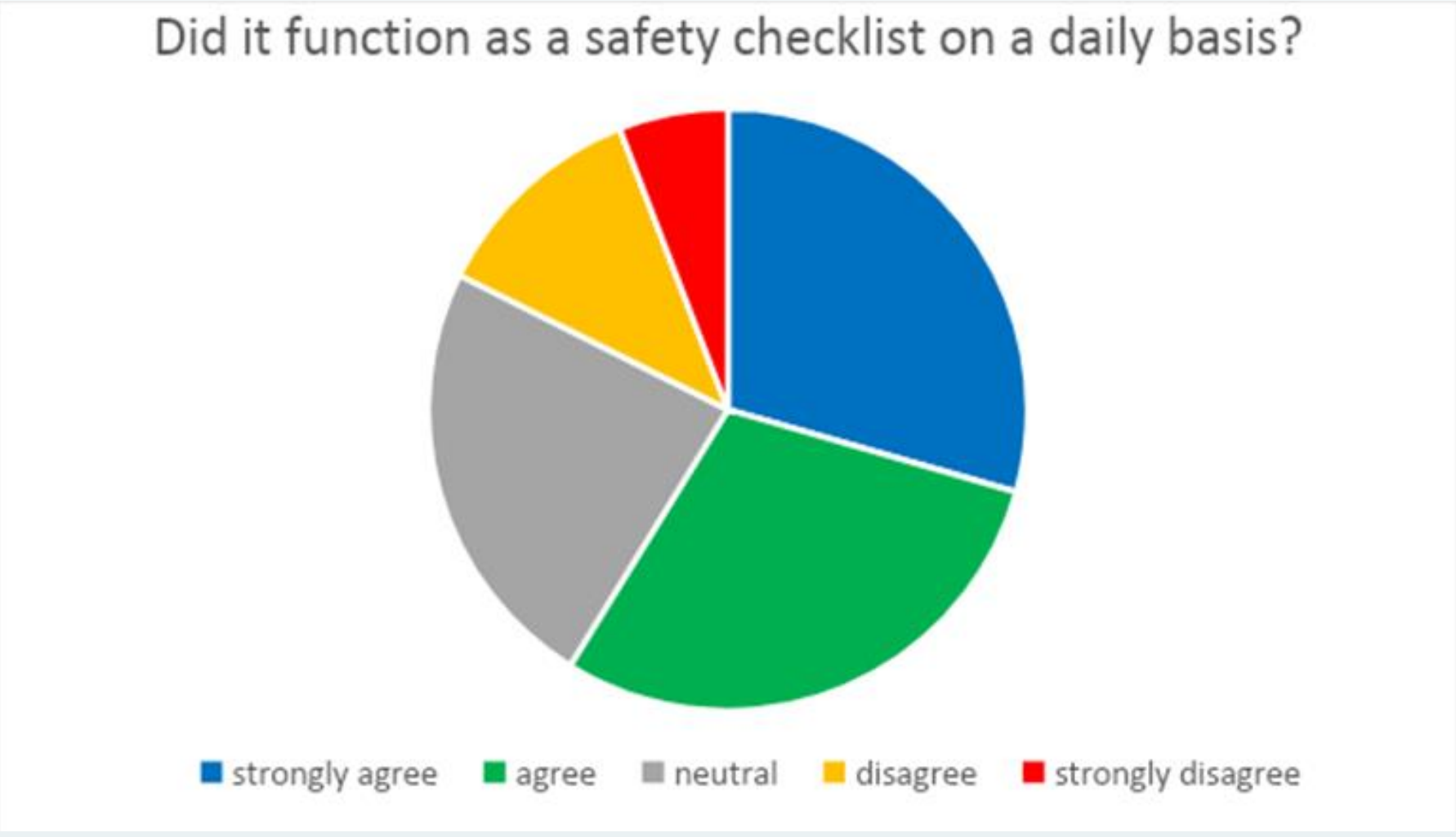
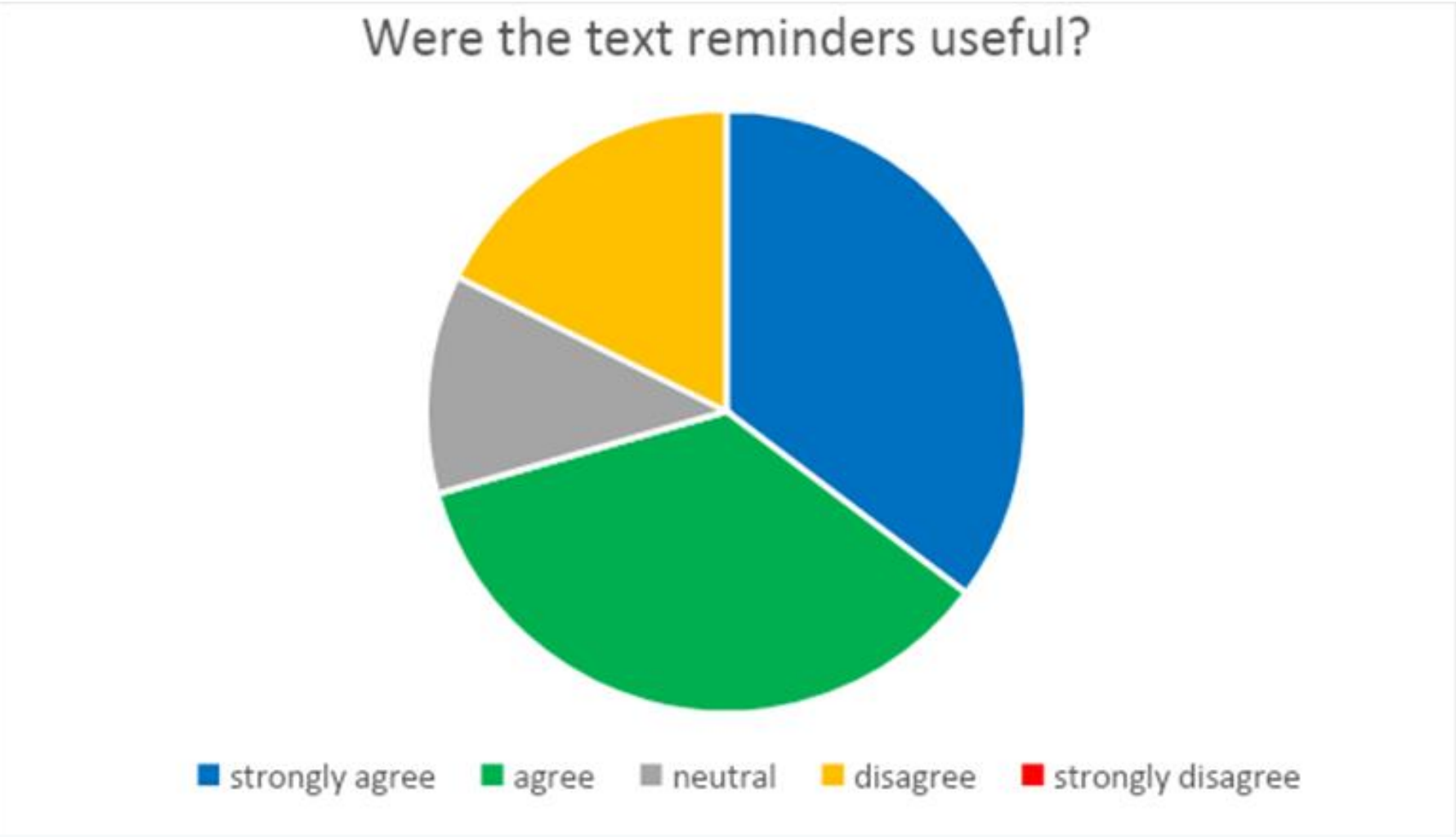
Collaboration between graduate medical education (GME) and health systems is essential for the success of patient safety initiatives (1). Reports show strong support to the concept of using incentives to change behavior in residency training to improve patient outcomes, resident effectiveness and efficiency of care, and decrease errors within the system through the use of hospital data and alignment of hospital and resident training goals (2). Most of the current literature on inpatient patient safety checklists or huddles are mainly for nursing or pharmacy teams. Our residency program launched a pioneer project called “Residency Patient Safety Checklist Survey” in November 2019. The Phase One lasted for three months and feedback was collected to assess its value and design.

Goal

Our goal was to promote awareness and teamwork on patient safety among resident trainees and to engage them in improving patient outcomes through establishing a set of safety checklist/metrics aligning with an incentive program.

METHODOLOGY & PROGRESS:

A QR code with a daily checklist survey was provided on the top corner of every computer in resident work areas. Five to six safety tasks appeared in the checklist survey for residents to check the items they complete each day. The number of tasks performed and checked were self-reported by the team at the end of the day. Participation was voluntary. The checklist was also posted on the whiteboards of each room for easier reference during team rounds and rotated every week and repeated each month. The complete list is shown in Figure 1. The competition was team-based, and the team with the highest total number of tasks completed by the end of each month was awarded with \$105 gift cards from the program department fund. We have a total of 6 regular floor teams (which consist of 1 senior resident and 2 interns). Winning teams were celebrated with a prize presentation. Group pictures were taken and posted on our quality and patient safety website.



Results

Phase One feedback surveys were done after 3 months of trial with the response rate of 17 out of 27 residents. We received encouraging results and comments as below.

- 88% strongly agree/agree that the questions raised their awareness and attention on patient safety.
- 59%t strongly agree/agree that the questions function as a safety checklist on a daily basis.
- 71% strongly agree/agree that the text reminders were useful.
- 82% strongly agree/agree that we should continue this monthly checklist competition. (Figure 2)

Additional Comments quoted:

- Good way to increase awareness.
- I think it's a great way to bring these issues up and should continue!
- I find it useful and also enjoyed the competition!
- It's great!
- I like it!
- Make it mandatory.
- Could discuss on rounds.



Suggestions for improvement of the checklist/competition design:

- Keep questions short and easy to complete.
- Safety checklist questionnaire should first be evaluated in an objective fashion to determine whether or not the survey offers any benefit in reducing length of stay, risks to hospital patients, morbidity/mortality etc. prior to researching ways to simply improve response rate. Frequent reminders and daily surveys interrupt workflow, create micro-tasks which are known to impact patient care.



Challenges/Areas identified for potential improvement in the Phase Two implementation based on the Phase One feedback survey results:

- Rename and simplify the daily checklist survey to “Patient Safety Checklist.”
- Develop an accurate resident metric tracking system linked to the hospital dashboard (CMS) through close collaborations with Clinical Informatics.
- Keep the checklist short and precise.
- Rotate checklist monthly instead of weekly
- Redesign incentives: money vs gift cards. Winners:
 - 1) Anyone who reaches 15 checked items per month can enter a lucky draw to win \$30 gift card.
 - 2) The winning team with the highest total number of checked items will be rewarded with a \$60 gift card.
- Monthly team certificate for the winners.

Conclusion

Based on the data from existing literature, our initiative is a potential tool not only to reduce medical errors and improve patient care outcomes, but also to shorten LOS and reduce readmissions. It also promotes awareness of patient safety and training in the early stages of the medical training. In Phase Two of our project, collaboration with Clinical Informatics will play an important role in data extraction and metrics linkage to individual resident performance. We will also refine the checklist and focus on five or six key value-based metrics. Through the redesign of the checklist competition, we hope to advance training of patient safety early in residency education.

Reference

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