Abstract: 5341

Safety/QA/QI Projects

A targeted feedback system to identify and mitigate environmental irritations to improve regional anesthesiologist well-being

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Introduction

Physician burnout is known to have detrimental professional and personal outcomes and negatively affect patient care(1,2). The risk of burnout is especially high amongst anesthesiologists, with the self-reported incidence being as high as 50% and greater than 67% being identified as being at high risk(3). One way to cultivate workplace well-being and try to attenuate burnout at its roots involves addressing the little things that are bothersome and seem minor in isolation but accumulate. Such efforts have been likened to removing the pebbles from our shoes.

To identify and target "pebbles", we designed a system to collect and stratify areas for improvement for a regional anesthesia and acute pain service at a busy academic medical center. Ultrasound machines are indispensable in the regional anesthesia service and identified as an effective conduit for obtaining targeted, real-time feedback from the regional anesthesia team.

Our primary aim was to develop a system to identify and address issues that may contribute to regional anesthesia personnel burnout. Our secondary aim was to evaluate this system's effectiveness by reviewing the changes achieved and satisfaction improvement at the end of the study period.

Materials and Methods

As the project is devoid of patient identifiable information, it is exempt from IRB review requirements as per UCLA policy.

To identify possible "pebbles" for the UCLA regional team, scannable QR code labels were affixed on the ultrasound machines in the UCLA-Santa Monica Medical Center and Surgical Center perioperative units. The QR codes were linked to a fillable Google form allowing users to report their pebbles, proposed solutions, and contact information if desired. An email was sent to the regional team faculty, fellows and rotating anesthesia residents to elaborate and encourage participation.

Collected pebbles were evaluated and categorized by their anticipated timeframe and perceived ease of intervention: Green (resolvable in 4 weeks), Yellow (will take >1 month), and Red (extremely difficult/cannot be accomplished).

Pebbles and progress were presented to the regional team faculty on a weekly basis. Solutions that were agreed upon were subsequently implemented and broadcasted to the relevant parties. Analysis of the collected data helped to identify the proportion of issues resolved. Problems were categorized to identify their root causes.

The effect of this project on the regional team's performance and well-being was evaluated using a validated psychological safety assessment tool. Regional team members were asked to complete a 11-question survey on initiation of the project. The same survey was applied again upon project completion to quantitatively analyze changes in their psychological safety and well-being.

Results/Case Report

Four weeks into initiation of the pebble project, 11 pebbles were reported and identified, of which 7 (63.6%) were categorized as green(resolvable in 1 month.) Most of the issues were equipment, policy or environment-related. Equipment concerns formed the majority of reported pebbles.

Within four weeks, 6 out of 11 (54.5%) problems were resolved or had a solution in progress.

Pre-intervention, there were 11 respondents to the psychological safety survey. The results highlighted several potential areas for improvement. A majority of the respondents (8 out of 11, 72.7%) felt safe offering new ideas. However, more than half (6, 54.5%) did not fully agree that people discussed mistakes and solutions and learning points sufficiently. 4 (36.3%) strongly agreed that time was spent finding new ways to improve the team's work processes.

Responses to the survey would be collected again at the end of the 3-month intervention period and quantitatively analyzed to assess the impact of our initiative on staff well-being.

Discussion

By streamlining the feedback process, we found that the bulk of the problems identified were simple, with straightforward solutions. Across the initial 4 weeks, we managed to commence work on more than half of the submitted issues. The results of our pre-intervention survey corroborated that while our team was generally content with our workplace environment, there were still several areas for improvement.

While burnout is frequently multifactorial, unmanaged chronic workplace stress has been identified as a major contributor(4). Multiple conceptual models recognize the importance of the work environment and healthcare system on professional fulfillment. Provider feedback is invaluable to this strategy to improve wellbeing, but feedback systems are often poorly designed and implemented. Feedback systems that are excessively burdensome may be ineffective and risk alienating, rather than engaging, clinicians. A lack of change reported also leads to doubt on the value of giving feedback.

In the Institute for Healthcare Improvement Framework for Improving Joy in Work, factors that seem minor but can wear away at the employee's enjoyment at work daily were emphasized as a major impediment to staff engagement(5). Our aim in this project was to develop a system for identifying, triaging, and acting on such workplace annoyances for regional anesthesia teams. The successful uptake of this project highlights the often-overlooked impact of basic measures in improving clinical processes and provider experience. By removing the obstacles to feedback collection and having dedicated sessions to categorize and review problems that could be readily addressed, we have demonstrated one framework designed to enhance regional anesthesia personnel well-being and performance in a relatively

reproducible and broadly feasible fashion.

References

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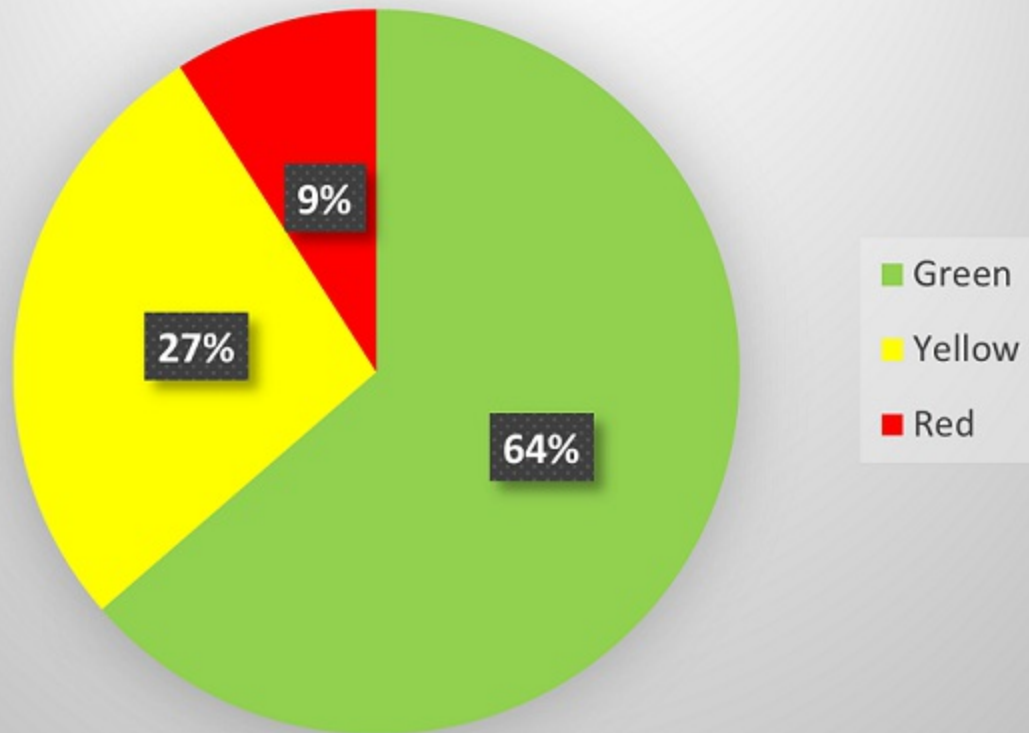
Disclosures

No

Tables / Images

SCAN ME TO REPORT ISSUES!

Pebbles by complexity

Legend: Green, Yellow, Red

- 64% Green
- 27% Yellow
- 9% Red

Psychological Safety Well-Being Survey

Question
In this team, it is easy to discuss difficult issues and problems.
I won't receive retaliation or criticism if I admit to an error or mistake.
It is easy to ask a member of this team for help.
I feel safe offering new ideas, even if they aren't fully-formed plans.
In this team, people are accepted for being different.
My teammates welcome my ideas and give them time and attention.
Members of this team could easily describe the value of others' contributions.
In this team, people talk about mistakes and ways to improve and learn from them.
We take time to find new ways to improve our team's work processes.
Members of this team raise concerns they have about team plans or decisions.
We try to discover our underlying assumptions and seek counterarguments about issues under discussion.

Categories of Pebbles