Pulse Check:
A Tool for Real-Time Monitoring and Managing Nursing Workflow

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Background

- 2019 transition from small 24-bed semi-private unit to a spacious 32 bed, all private room unit (Miller 5).

- Staff felt isolated and unable to find help when it was needed

- The Miller move correlated with lower NDNQI scores across most categories
  - Miller 5 Unit Based Council focused a project on teamwork, specifically targeting RN to RN interactions

Background

- Organizational psychology research indicates employees who are able to cope with daily job demands are

  - Better able to cope with negative events
  - More productive
  - More committed to the organization
  - Less prone to burnout and turnover

  - Pulse checks are typically deployed at interdepartmental and managerial level.

Purpose

This abstract describes how we apply pulse checks to improve nurses' coping with daily job demands and manage workflow on a busy inpatient oncology unit.

- A **Pulse Check** is a brief targeted survey conducted at frequent intervals and allows for a more dynamic measurement and response cycle.

The Pulse Check

Stress Level:

1) I'm good and managing well.

2) I'm busy but ok. I can manage things on my own.

3) I'm busy and need help. **Staff with lower stress levels to seek out those with stress level 3.**

4) I'm overwhelmed and am unable to meet the needs of my patients. **All hands on deck. Charge to escalate as necessary to acquire needed resources.**

PRN Pulse Check: Please report a stress level of 3 or 4 as soon as possible, at any time of day, regardless scheduled pulse check times.

Implementation

- Charge Nurse enters "Pulse Check" into our group chat at designated Pulse Check times

- We check in with *every* member of our staff: nurses, LNAs, unit secretary

  o <u>Every 4 hours</u>: 1000, 1400, 1800, 2200, 0200, 0600
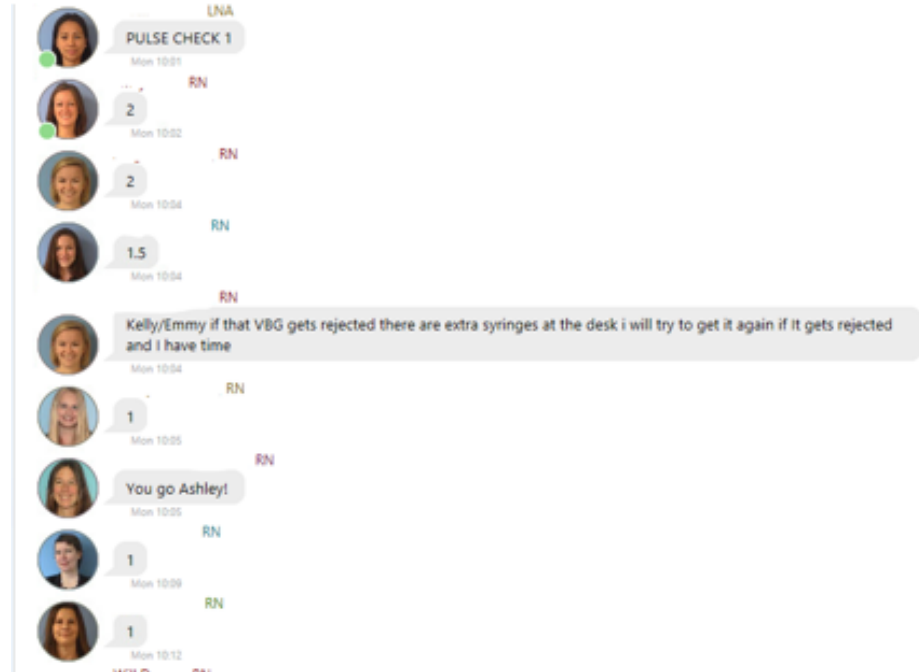
Implementation

- Some examples of when one might ask for help:

  o Nursing
    - "I'm really behind on documentation. Can you please give 1400 meds to 104?"
    - "It's 1400 and I haven't had anything to eat or used the bathroom. Can you please reassess pain in 310?"
    - "I need to work my patient up for a neutropenic fever. Can you please pass meds for 118?"
    - "I need to give chemo premeds and blood for two different patients at the same time. Can you please premedicate 114 while I hang blood for my other patient?"
  o LNA
    - "I'm behind on vital signs, can you please answer 105's call light so I can get them done?"
  o Unit Secretary
    - If the unit secretary is a 2 or greater, the charge nurse or circulator might be sure they are at the desk and answer all the phone calls.

Pulse Checks Over Time: Day Shift

Pulse Check Daily Stress Ratios: Day Shift
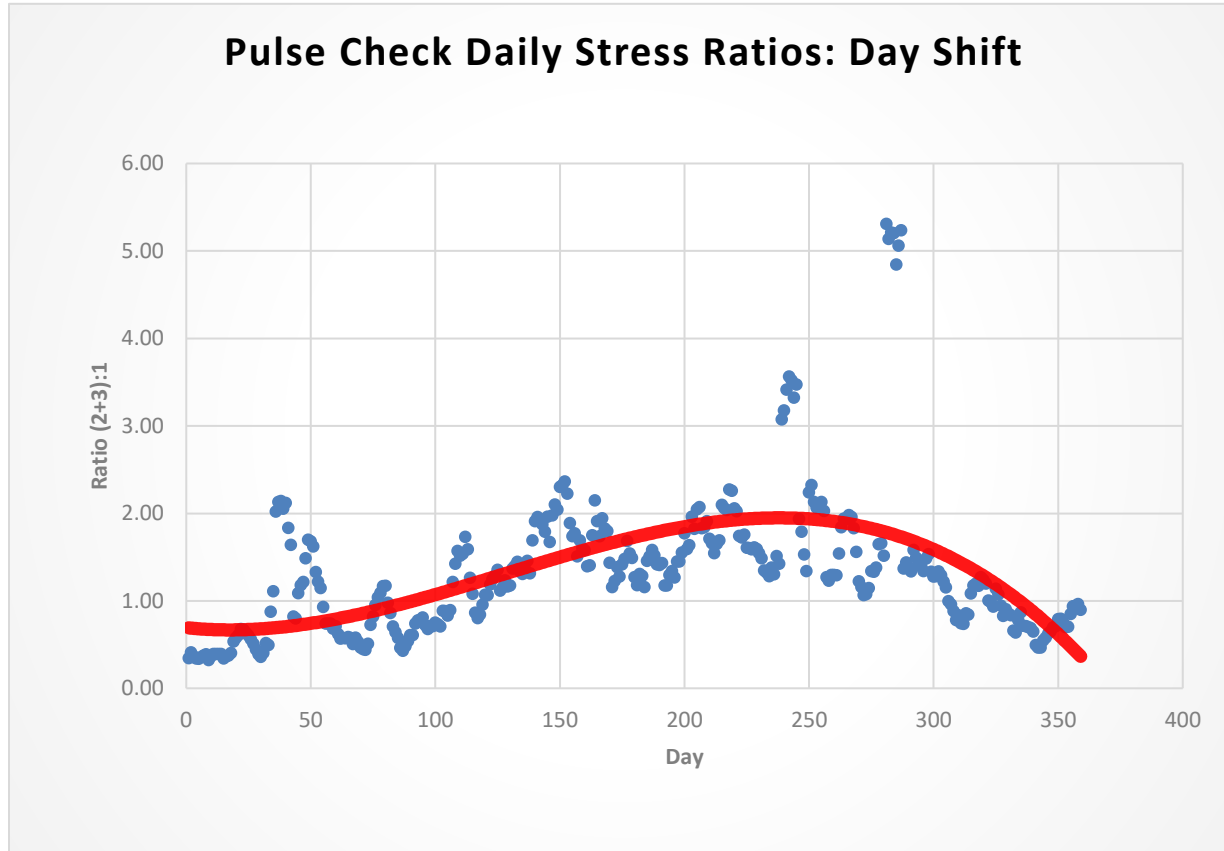
Pulse Checks Over Time: Night Shift

Pulse Check Daily Stress Ratios: Night Shift
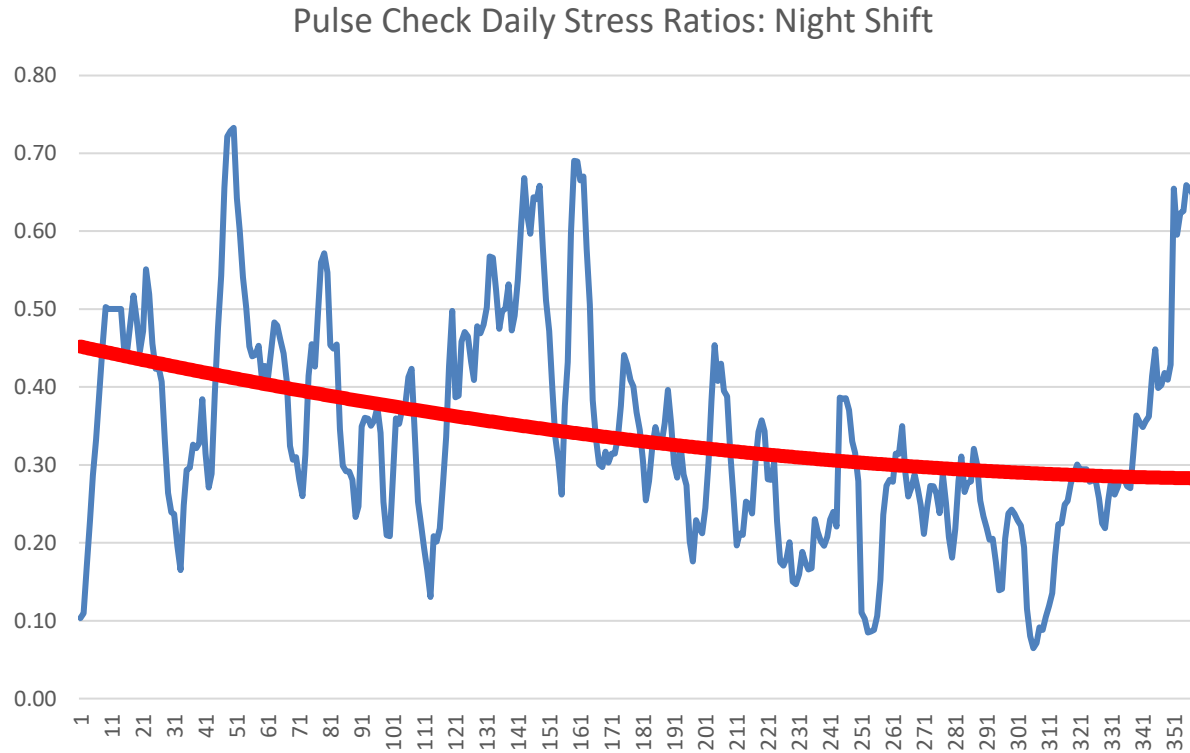
Evaluation

- Staff surveyed at one month and six months to determine how they perceived pulse checks affected their work.
  - 45% and 73% of staff rated pulse checks as extremely valuable at one and six months respectively.
  - 95% of staff felt pulse checks increased their awareness of unit work flow
  - 91% of staff felt pulse checks greatly improved teamwork
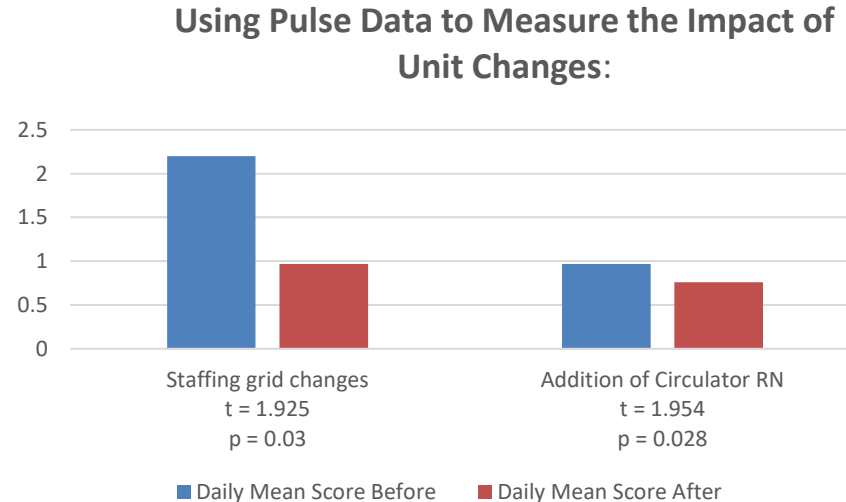 - 86% of staff felt pulse checks improved response times when they needed help

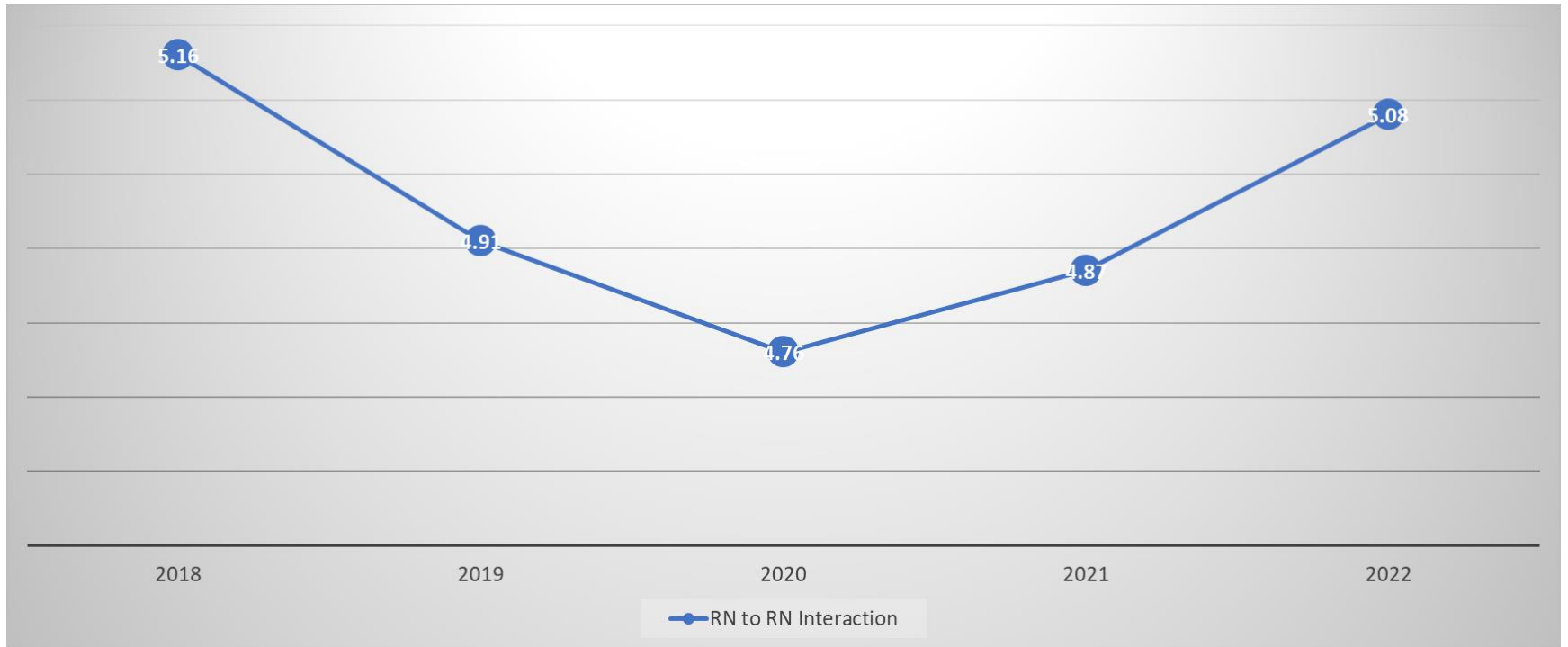# Staff Response

Staff Survey Results
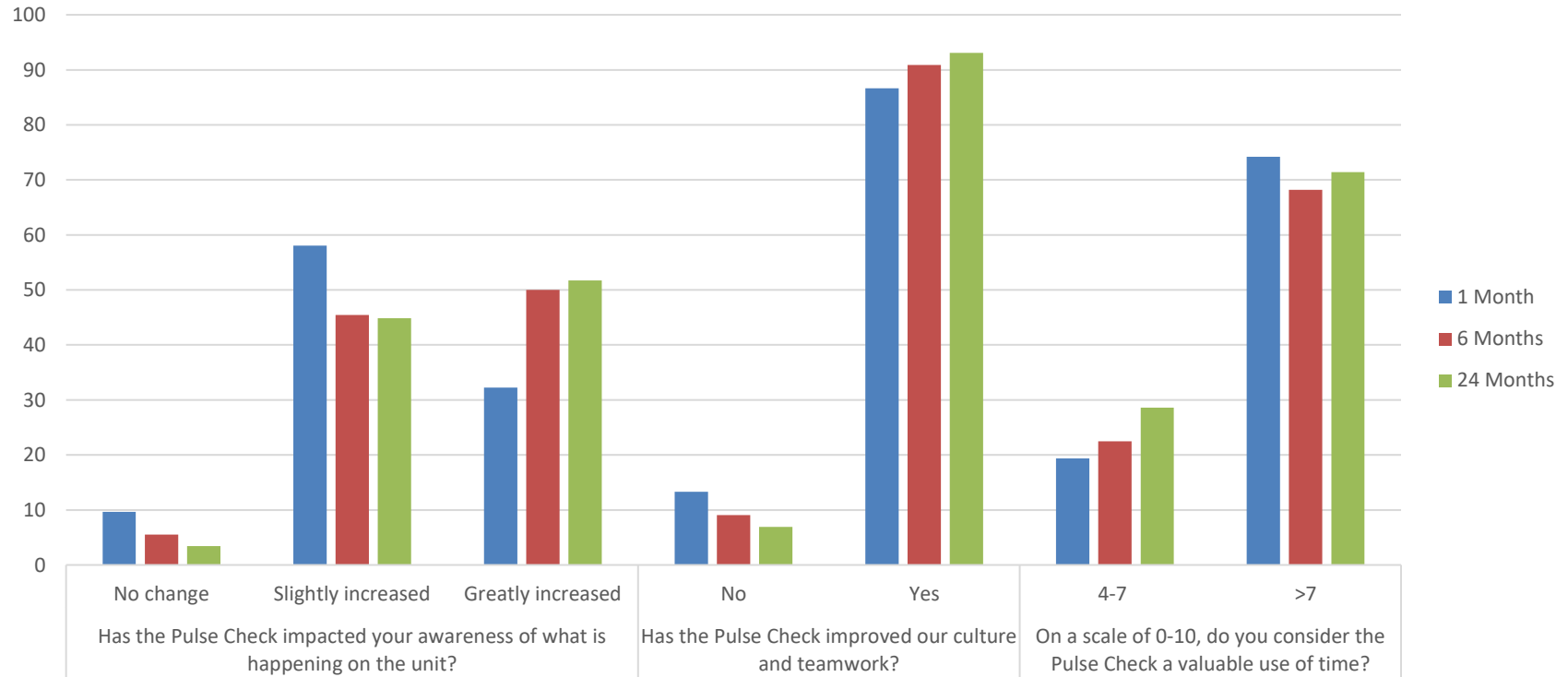
Response to Key Staffing Grid Changes

- Pulse check scores have quantitatively demonstrated the impact of staffing changes within a few weeks and are statistically significant at p=0.05.

Using Pulse Data to Measure the Impact of Unit Changes:

| | Staffing grid changes
t = 1.925
p = 0.03 | Addition of Circulator RN
t = 1.954
p = 0.028 |

■ Daily Mean Score Before   ■ Daily Mean Score After

NDNQI RN to RN Interaction

Things Heard On Our Unit

- In the group chat: "I'm a 1 if anyone needs anything!"

- Between two nurses: "My patients are good. What can I do to help you?"

- From a floor nurse to the charge nurse: "I'm all caught up. Are you aware of anyone who is really busy?"

Lessons Learned and Future Directions

- Pulse checks allow for real time measurement of nurses' stress.

- Allow team resources to be deployed efficiently and quickly to reduce the overall stress level of the unit.

- Allow for accelerated evaluation of workplace changes.

- Ongoing analysis to optimize data collection intervals and explore relationships with nursing sensitive patient outcomes may yield more benefits.

References

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Brown, M. (2022). Investigating the promise and pitfalls of pulse surveys. *Industrial and Organizational Psychology, 15*(1), 137-149.

Kanste, O. (2011). Work engagement, work commitment and their association with well-being in health care. *Scandinavian Journal of Caring Sciences*, 25(4), 754-61