

Geographical Zones: Improving Nurses Workflow In The Emergency Department

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Problem

- Registered Nurses have inefficient workflow due to the location of their assigned patients
- Interdisciplinary teams have difficulty locating the patient’s nursing staff
- Handing off patients in between shifts is cumbersome

Goal

To transition a 32 bed Emergency Department into geographical zones that positively impact RN workflow and unit structure.

Reference Literature

- Increase productivity, decreased call-bell times, and less overall steps taken (Donahue, 2009)
- A decline in number of call bells and falls (Donahue, 2009)
- Improved communication with interdisciplinary teams (Fries et al., 2014)
- Optimization of bedside shift report (Kingsley & Hill, 2017)
- Convenience in staff break coverage (Bean, 2025)

Development

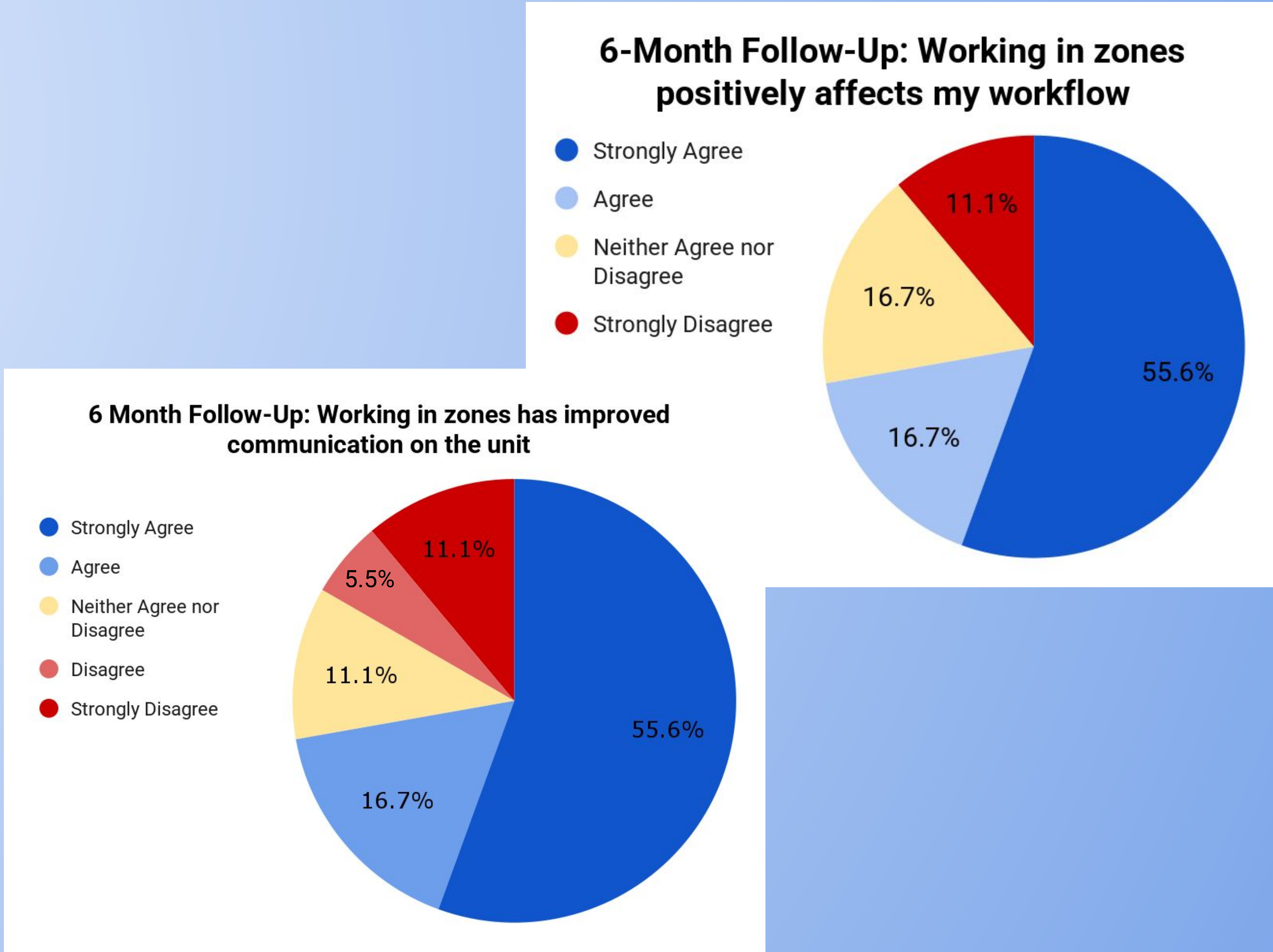
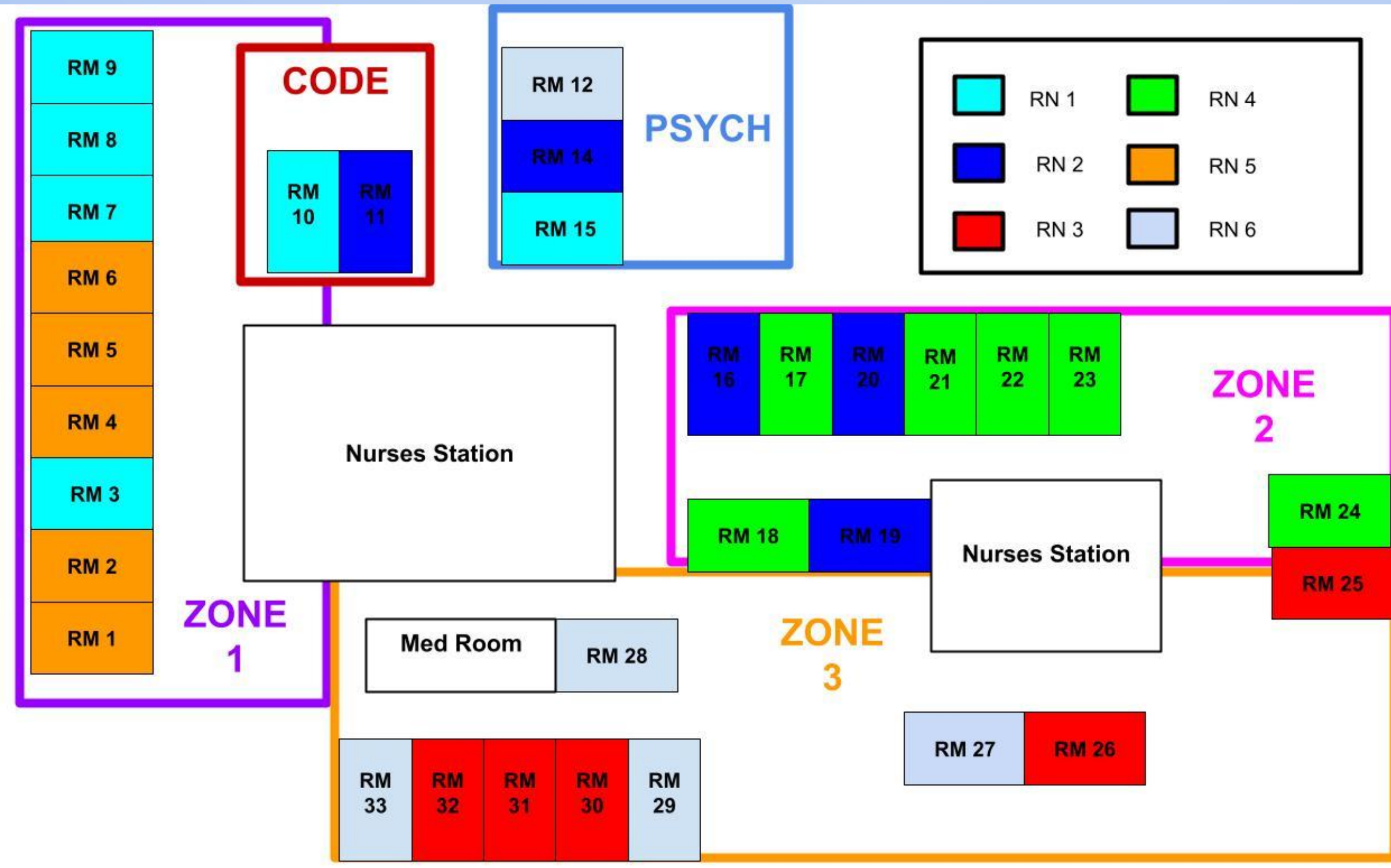
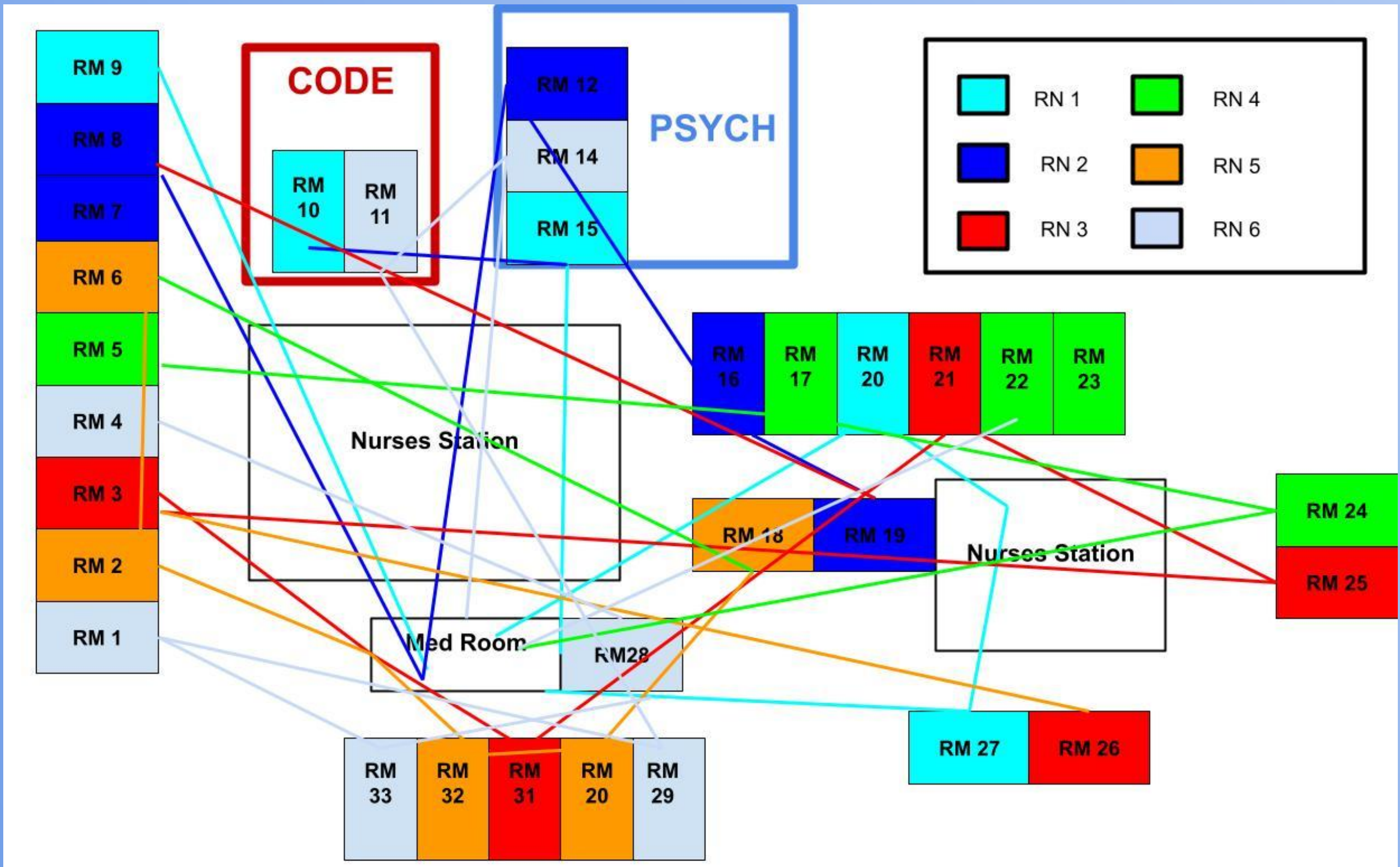
- Nursing staff expressed a desire to change the structure of the unit into a geographical zone model.
- A small group of staff had a breakout group where the unit was divided into 3 GZs with consideration for unit layout, patient acuity, staffing ratios, and the availability of cardiac monitors within the ED.
- The outlined zones were then shared with the unit council where staff agreed it was best to move forward with transitioning the unit into a GZ model for a 2 week pilot period.
- Educational material on the change was shared during the unit staff meeting, as well as a charge nurse meeting.
- Handouts were developed by the small breakout group for charge and triage to assist with the transition.
- All materials were also shared with the medical providers to ensure cohesiveness within the unit.

Data Collection

- A post implementation survey was distributed during a 2 week pilot period (n = 16)
- A follow-up survey was distributed to Nursing staff 6-8 months post implementation (n = 18)

Results

- 83% of reponses agreed / strongly agreed staying in zones was best for the unit
- 72% of responses agreed zones positively affected their workflow
- 72% of responses agreed zones improved unit communication
- Nurses felt a strong sense of teamwork and enjoyed increased autonomy with break coverages



References

Bean, M. (2025, January 2025). *Tampa General zones in on nurse efficiency*. Becker's Hospital Review. <https://www.beckershospitalreview.com/nursing/tampa-general-zones-in-on-nurse-efficiency.html>

Friese, C. R., Grunawalt, J. C., Bhullar, S., Bihlmeyer, K., Chang, R., & Wood, W. (2014). Pod nursing on a medical / surgical unit: Implementation and outcomes evaluation. *Journal of Nursing Administration*, 55(2), 80-87. <https://doi.org/10.1097/JNA.0000000000001181>

Kingsley-Mota, G., & Hill, B. (2017). *Care zones staffing model: Solving workflow barriers to improve patient and nurse outcomes* [12,30]. Emory University Hospital.

Donahue L. A pod design for nursing assignments: eliminating unnecessary steps and increasing patient satisfaction by reconfiguring care assignments. *Am J Nurs*. 2009 Nov;109(11 Suppl):38-40. doi: 10.1097/01.NAJ.0000362019.47504.9d. PMID: 19826335.

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