

Delirium Precautions Sign for GSRMC Inpatients Age 65 and Older

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BACKGROUND

- Delirium is a disturbance in attention, awareness and cognition that develops over a short period of time with fluctuations throughout the day that represents a change from baseline¹
- While treatment of delirium addresses the root cause, prevention is truly the best strategy. The ABCDEF bundle uses non-pharmacologic and pharmacologic approaches that members at every level of the healthcare team (including family) can address².

Assess, prevent and manage pain

Both spontaneous awakening trials and spontaneous breathing trials

Choice of analgesia and sedation

Delirium, assess, prevent and manage

Early mobility and **E**xercise

Family engagement and empowerment

OBJECTIVES

- Assess whether staff noticed a delirium precautions sign, learned from the sign and if they think the sign was beneficial to patient care.
- Assess whether the use of a delirium precaution informational sign outside of patient rooms improves adherence to delirium protocols. Signs include ABCDEF bundle recommendations.

METHODS

- A delirium precautions sign was designed by the study investigators and implemented in the Oncology 3-South unit at GSRMC.
- When a patient was diagnosed with delirium or deemed to be high risk (age 65+), a sign was to be placed outside their door by the charge nurse or nurse of the patient.
- An anonymous survey was used to ask physicians, nurses, and support staff about their experience using the sign.
- Observational surveys were also done by study investigators periodically, to assess use of the sign and adherence to some of the common recommendations for reducing the risk of delirium.
- Patients were deemed to be taking deliriogenic medications if they were administered opioid pain medicines, benzodiazepines, antihistamines, antispasmodics or anticholinergics
- In this report, we compare adherence across patients who did vs did not have the sign up during observational surveys, using Pearson's Chi-Squared tests or Fisher's Exact Tests when any cell size was 5 or smaller.



Scan code to see the delirium precaution sign

RESULTS

- 45 care team members completed a survey.
 - Overall, a majority of care team members noticed the delirium precautions sign (93%). This was highest for Nurses and CNA's, and lowest for physicians (Figure 1).
 - Of those who noticed the signs, 45% agreed that they learned something from them. This was highest for Other staff and lowest for CNA's (Figure 2).
 - 57% of staff agreed that the delirium signs were beneficial to patient care. This was highest for Physicians and lowest for Nurse's and CNA's (Figure 3).
- Study investigators recorded 71 total observations.
 - Overall, the sign was up for 65% of all observations (46 observations).
 - Figure 4 shows that compliance for having blinds open and having familiar objects in the room was higher for observations where the sign was up. However, observations where the sign was up also had higher use of deliriogenic medication. None of these differences were statistically significant.

Figure 1. Have you noticed signs related to delirium put up outside of some patient rooms?

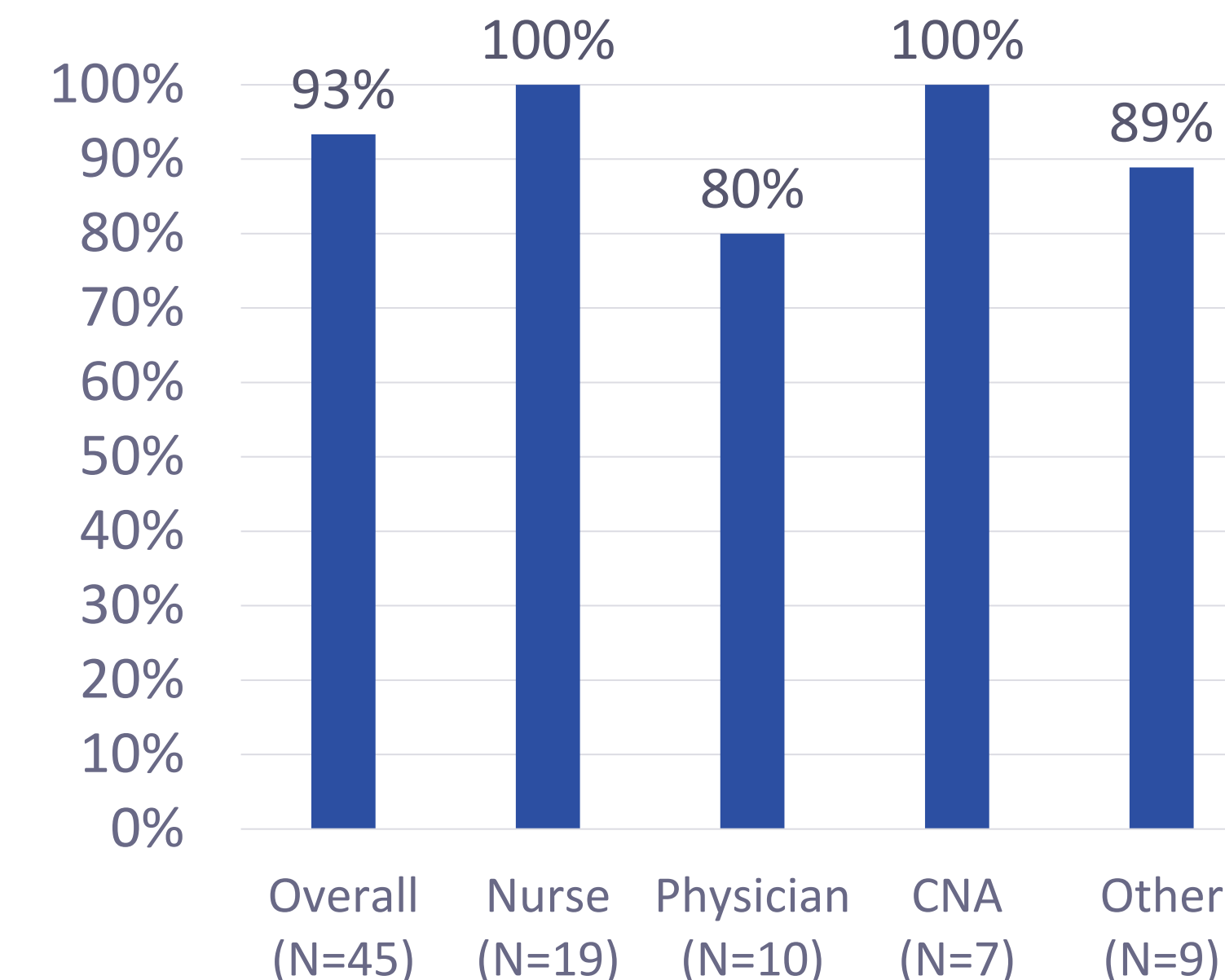


Figure 2. If you noticed the delirium signs, do you feel like you learned something from them?

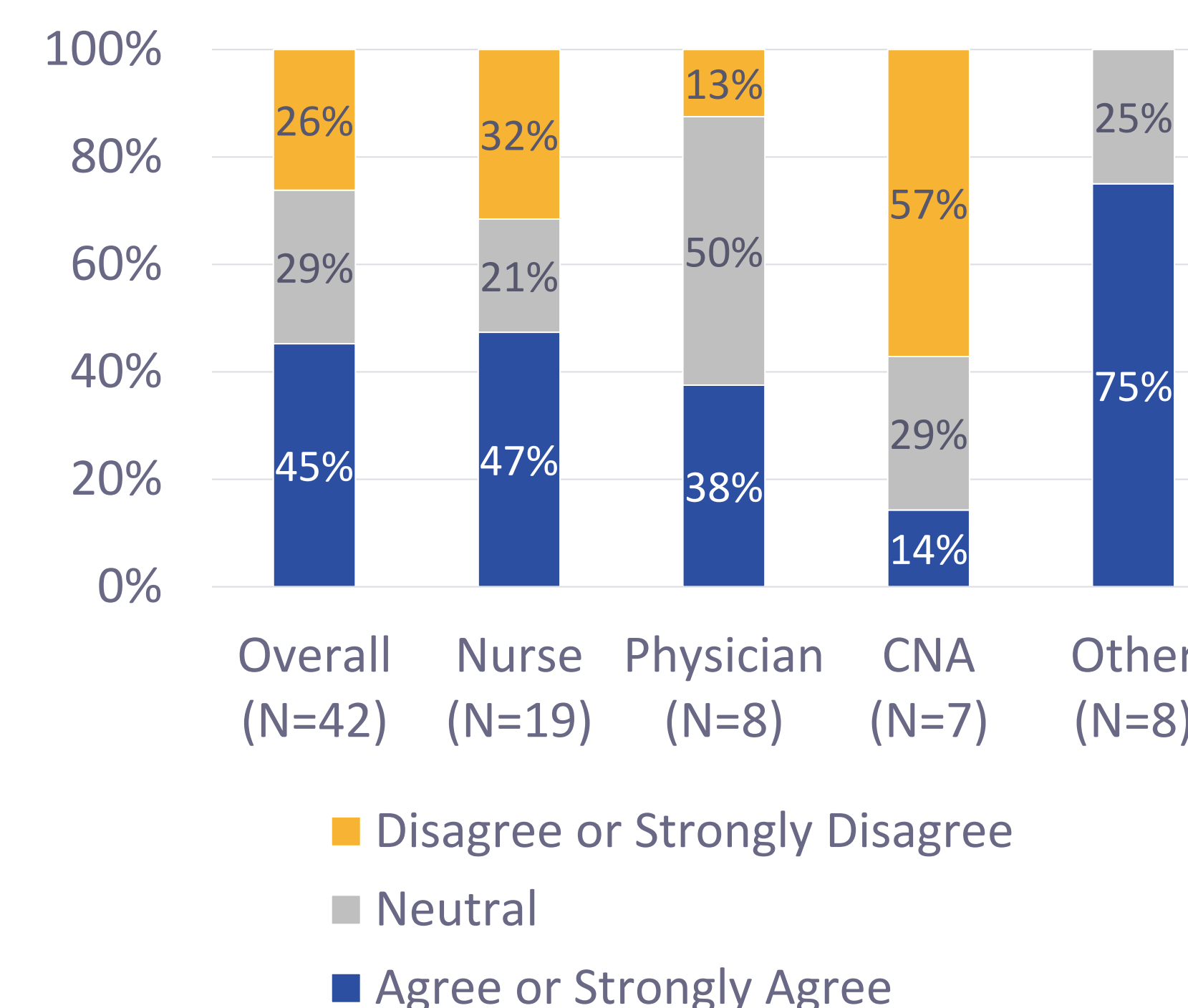


Figure 3. If you noticed the delirium signs, do you think the delirium signs were beneficial to patient care?

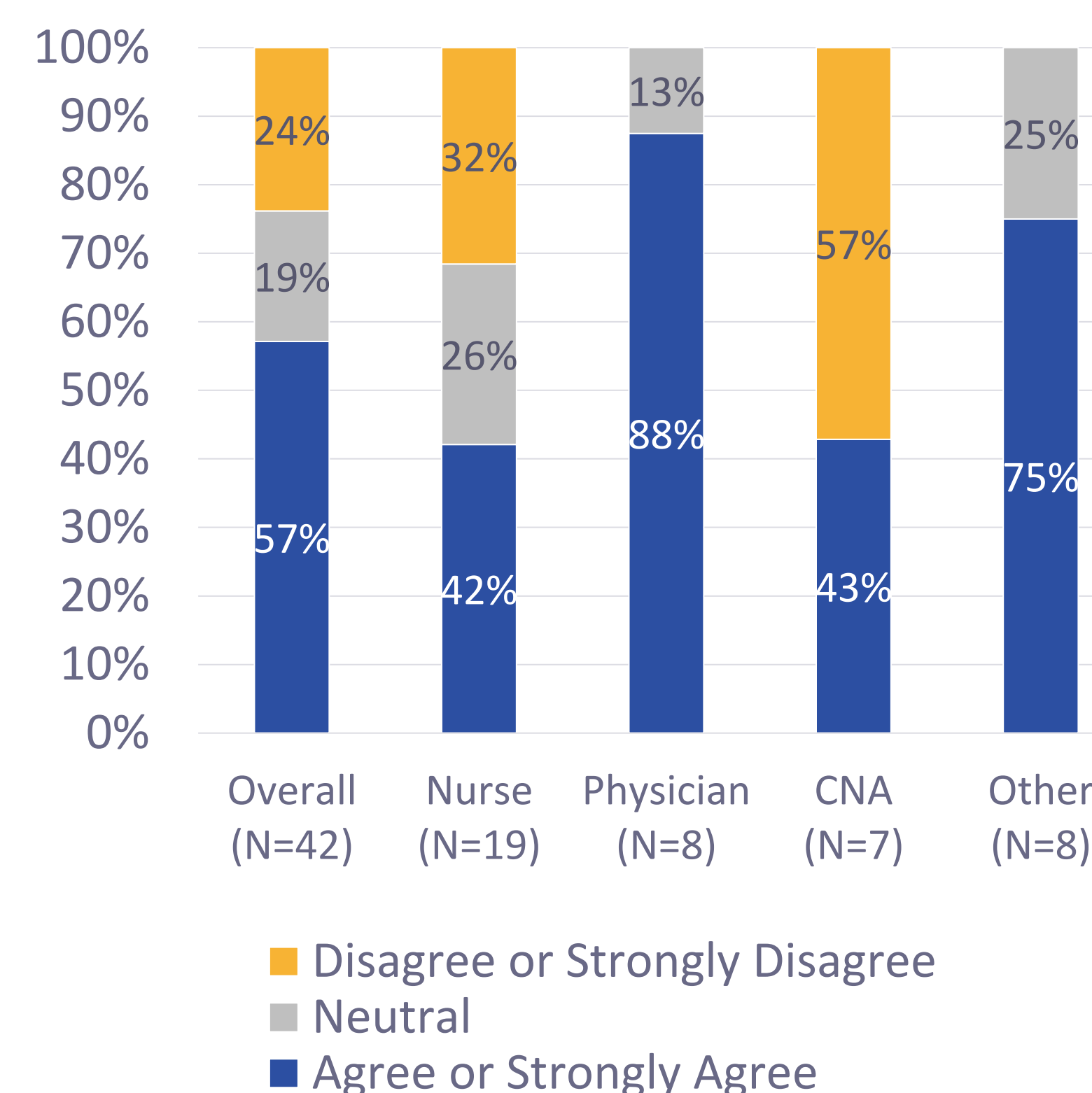
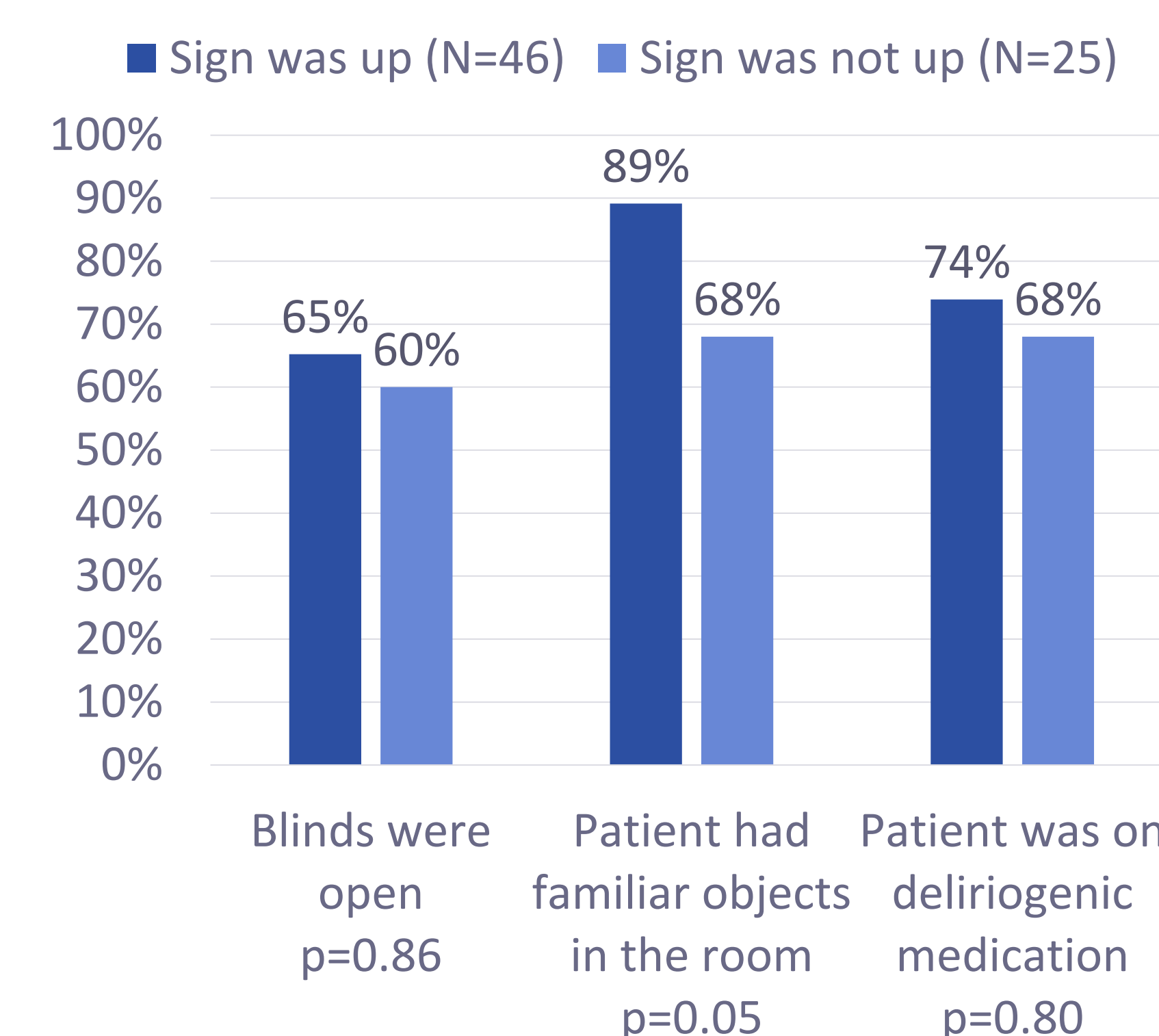


Figure 4. Compliance with delirium recommendations for observations with vs without the delirium precautions sign



CONCLUSIONS

- There were notable differences across care-team member roles when it comes to the perceived utility of the sign.
 - Physicians were more likely to indicate that utilization of a delirium precaution sign was beneficial to patient care. Investigators theorize that physicians may have preferred the sign more than other professions due to the promotion of least-invasive interventions for delirium prevention and management.
 - Nursing staff generally viewed the use of the signs as positive.
 - A majority of CNA's did not agree that the signs improved patient care. Further investigation of discrepancy between physician impressions and CNA impressions of the intervention would be helpful. Gaps in education regarding the reasoning for specific interventions may account for this difference between CNA's and other professions.
- Although not statistically significant, patients who had the delirium sign up during observations also had familiar objects present 21% more often, and had blinds up 5% more often, compared to patients without the sign. A larger study of multiple units may more clearly demonstrate statistical differences in care provided as a result of the intervention.
- A majority of patients with and without the intervention were on deliriogenic medications, including opioid pain medications. It would be useful in the future to include other general medical-surgical units in the study. Opioid pain medications are often necessary on oncology units and may present a confounding factor for this measure.

FUTURE IMPLICATIONS

- This project could be further modified to specifically target at risk patients rather than just all patients over the age of 65.
- Future trials could take place on non-oncology units to get a larger sample size prior to hospital-wide implementation.
- Educational talks/discussions/seminars could be provided to help improve staff member knowledge and care for patients at risk for delirium.

REFERENCES

- American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Arlington, VA, American Psychiatric Association, 2013.
- Marra A, Ely EW, Pandharipande PP, Patel MB. The ABCDEF Bundle in Critical Care. Crit Care Clin. 2017 Apr;33(2):225-243. doi: 10.1016/j.ccc.2016.12.005. PMID: 28284292; PMCID: PMC5351776.