

University of Vermont

UVM ScholarWorks

College of Nursing and Health Sciences Doctor
of Nursing Practice (DNP) Project Publications

College of Nursing and Health Sciences

2022

Increasing Utilization of the Delirium Prevention Protocol in Post Cardiovascular Surgery to Improve Quality and Safety of Healthcare

kristin Luce
University of Vermont

Follow this and additional works at: <https://scholarworks.uvm.edu/cnhsdnp>



Part of the [Nursing Commons](#)

Recommended Citation

Luce, kristin, "Increasing Utilization of the Delirium Prevention Protocol in Post Cardiovascular Surgery to Improve Quality and Safety of Healthcare" (2022). *College of Nursing and Health Sciences Doctor of Nursing Practice (DNP) Project Publications*. 107.
<https://scholarworks.uvm.edu/cnhsdnp/107>

This Project is brought to you for free and open access by the College of Nursing and Health Sciences at UVM ScholarWorks. It has been accepted for inclusion in College of Nursing and Health Sciences Doctor of Nursing Practice (DNP) Project Publications by an authorized administrator of UVM ScholarWorks. For more information, please contact schwyrks@uvm.edu.



Increasing Utilization of the Delirium Prevention Protocol in Post Cardiovascular Surgery to Improve Quality and Safety of Healthcare

Kristin Luce, RN-BC, MSN-CNL(c)

Faculty Advisors: Dr. Jason Garbarino, DNP, RN, GERO-BC, CNL and Brandon Brown, MSN, RN-BC, CNL

Background

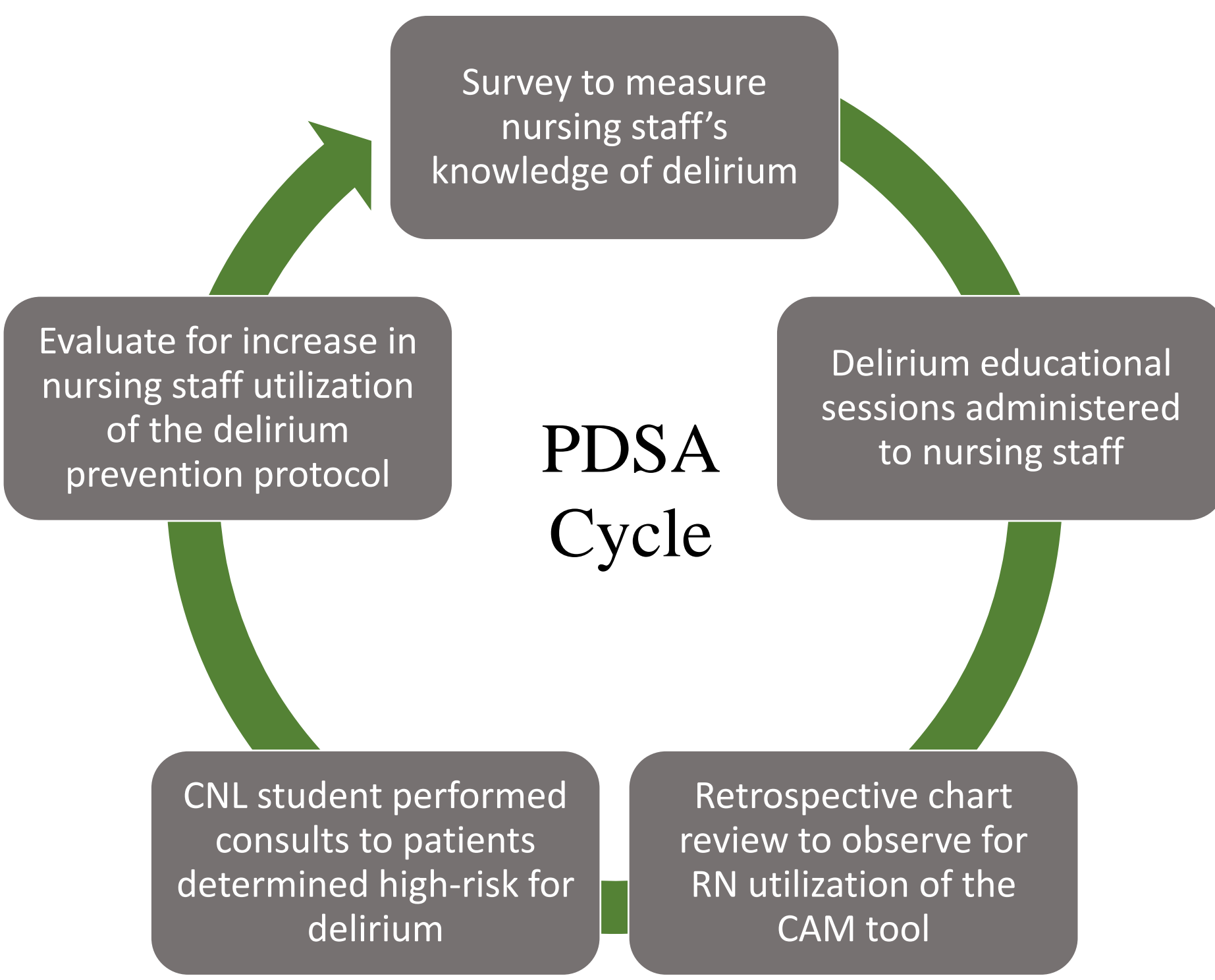
- Post-operative delirium (POD) is the most common complication seen following surgery in older adults.¹
- More than 60% of cases are diagnosed late or missed in everyday practice leading to a variety of long-term complications including:
 - Increased mortality rate
 - Persistent cognitive impairment²
- POD prevalence can be reduced by utilizing established screening tools, such as the Confusion Assessment Method (CAM).³

Aims

1. Increase delirium screening and provide delirium education to 80% of RNs and LNAs on a cardiovascular surgery unit.
2. Increase utilization of the delirium prevention protocol from nursing staff for patients who screen positive on the CAM tool by 50%.

Methods

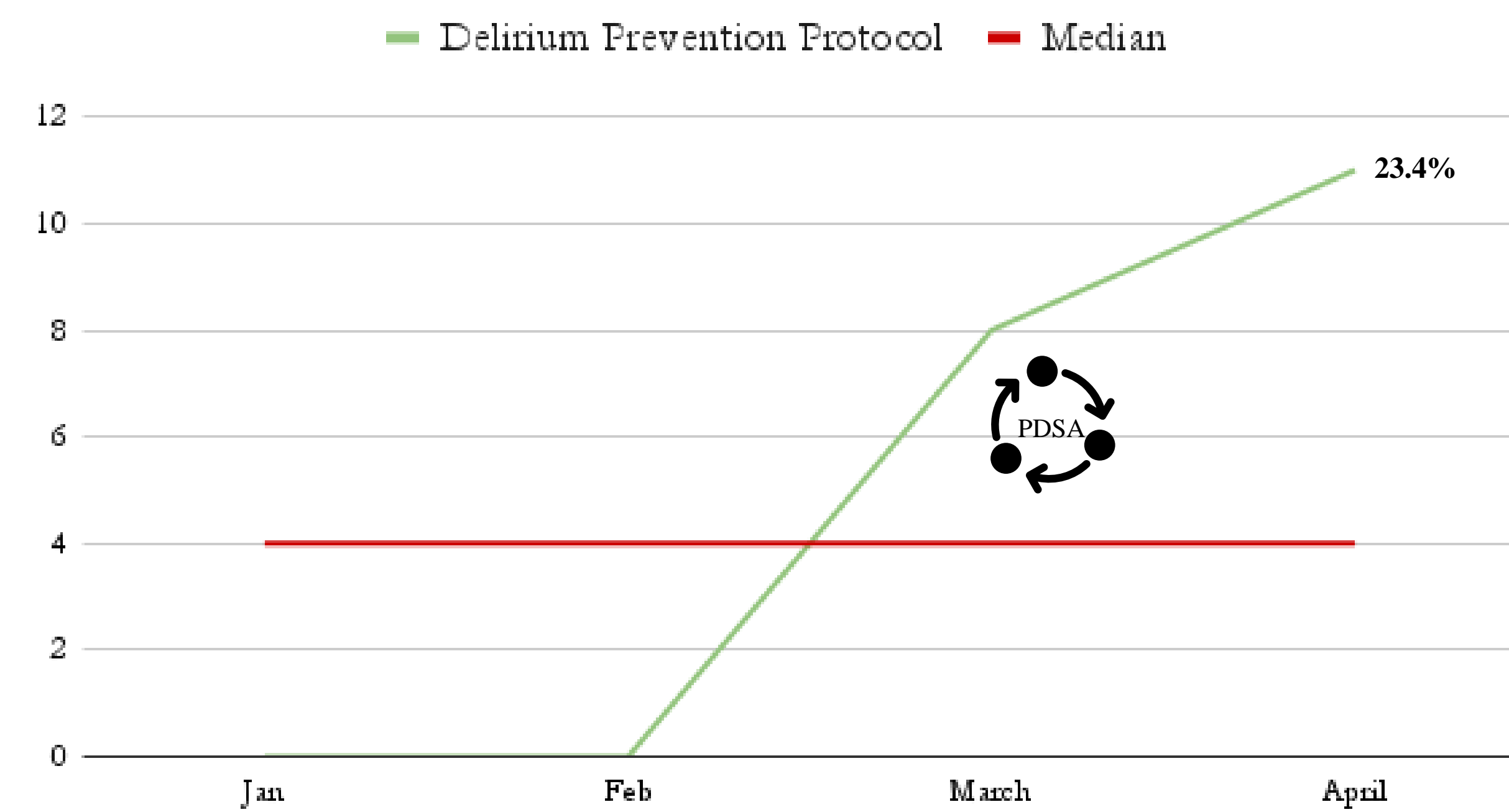
- Criteria for Delirium Prevention Protocol**
- Inclusion Criteria:**
- 70 years or above with at least one risk factor for cognitive decline:
 1. Cognitive impairment
 2. Mobility or ADL impairment
 3. Sensory impairment
 4. Dehydration
- Exclusion Criteria:**
- Length of stay <48 hours
 - ICU or ventilated,
 - Unable to communicate verbally or in writing
 - Comfort care
 - Major mental illness



- Educational sessions included: delirium risk factors, signs and symptoms, complications, and supportive care.

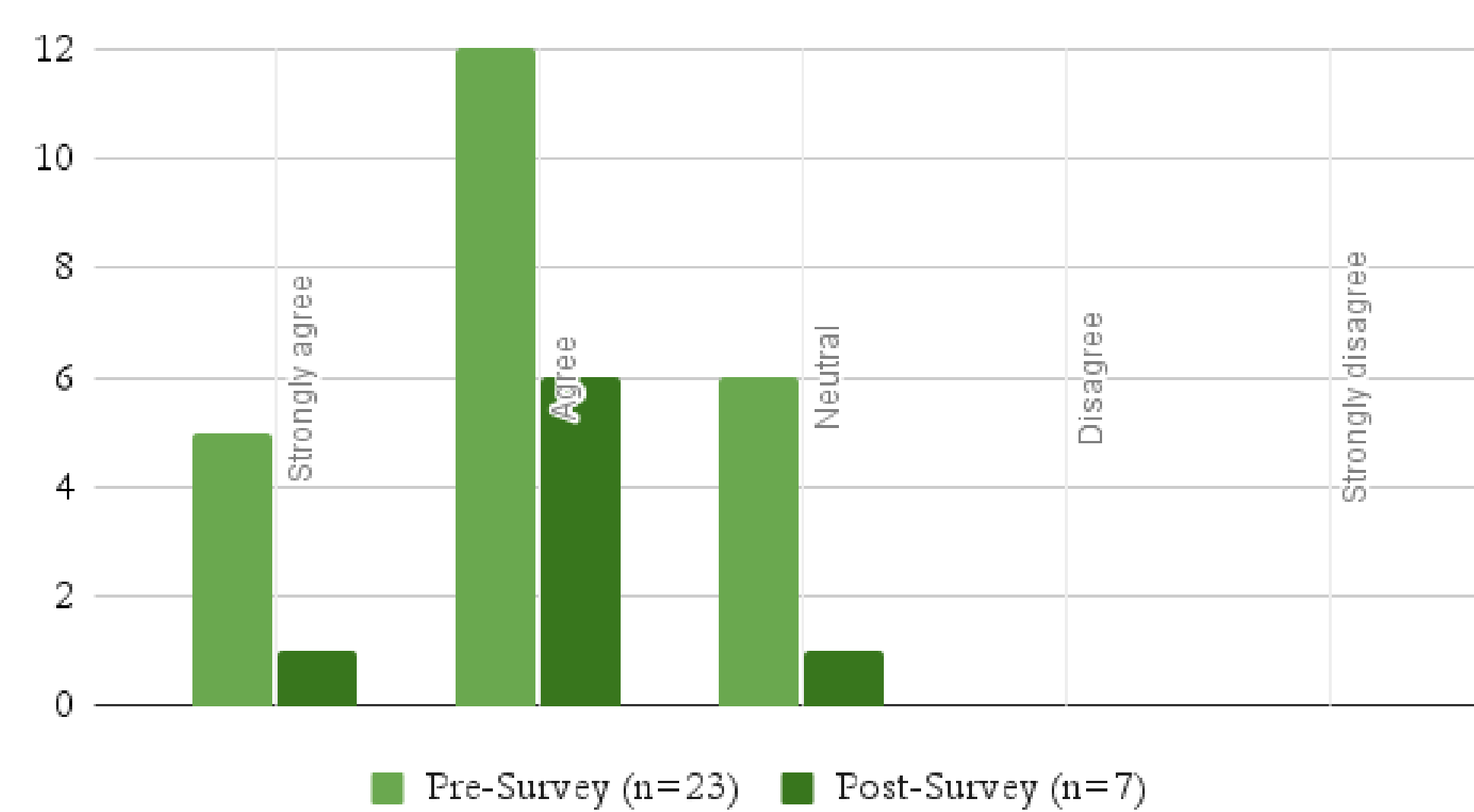
Results

Delirium Prevention Protocol Utilization



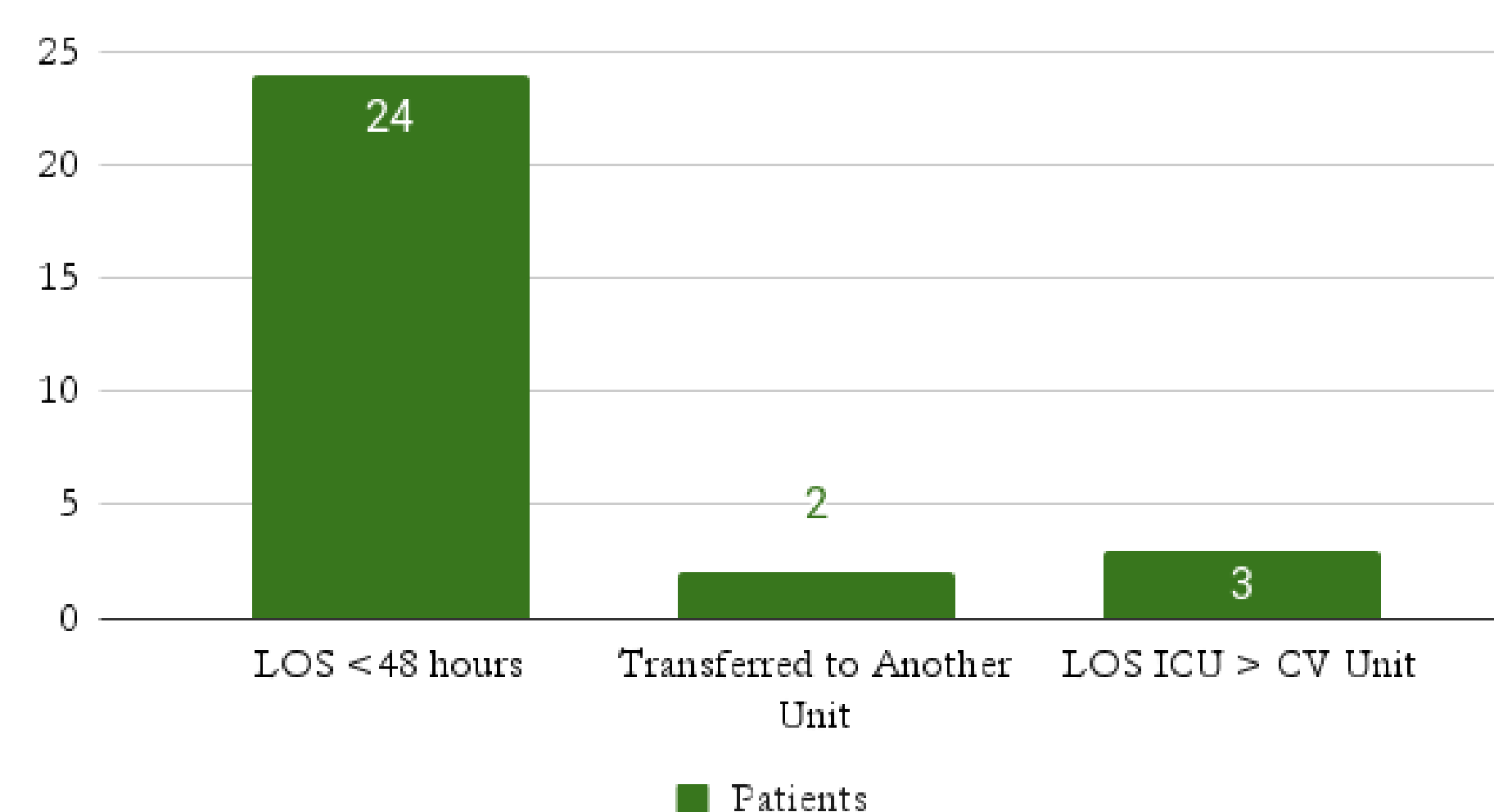
- 29.2% of 89 nursing staff attended an educational session and completed the pre-survey:
 - 26.9% of nursing staff completed the post-survey
 - 13.5% additional staff received an educational session

I know how to identify delirium.



- 47 patients met the Inclusion Criteria for the delirium prevention protocol:
 - 11 or 23.4% patients received a consult
 - 29 or 61.7% met the exclusion criteria

Exclusion Criteria For The Delirium Prevention Protocol



Discussion

- Retrospective chart review in March identified 0% of nursing staff was utilizing the CAM tool.
- The project direction was adjusted to focus on delirium screening in the CNL role.
- Role-modeling behavior can translate to improving staff utilization of the delirium prevention protocol.
- There was an increase in nursing staff's identification of delirium following educational sessions.

Limitations

- There was a high RN/LNA staff turnover during the project time frame.
- More than half the patients eligible met the exclusion criteria.

Conclusion

- The role of a CNL within a microsystem focused on delirium can greatly improve patient outcomes through patient and nursing staff education.
- Ongoing CNL practice can sustain quality improvement initiatives to address barriers in delirium screening.
- This project shows promise to be replicated beyond the cardiovascular surgical population.

References:

1. O'Hanlon, S., O'Regan, N., MacLulich, A. M., Cullen, W., Dunne, C., Exton, C., & Meagher, D. (2014). *Improving delirium care through early intervention: from bench to bedside to boardroom*. J Neurol Neurosurg Psychiatry, 85(2), 207-213. doi:10.1136/jnnp-2012-304334
2. Janjua, M. S., Spurling, B. C., & Arthur, M. E. (2021). *Postoperative Delirium*. In StatPearls. Treasure Island (FL).
3. Boltz, M., Capezuti, L., Fulmer, T. T., & Zwicker, D. (2020). *Evidence-based geriatric nursing protocols for best practice* (Sixth edition. ed.).



THE UNIVERSITY OF VERMONT
COLLEGE OF NURSING
AND HEALTH SCIENCES