

BACKGROUND

Catheter-associated urinary Tract Infections (CAUTIs) are among the most common hospital-acquired infections that lead to poor-quality health outcomes, increased hospital costs, prolonged hospitalization, morbidity, and mortality.⁴ ICU patients are at high risk for getting CAUTIs.^{4,1} The risk of getting CAUTI increases with unnecessary indwelling Foley catheter placement.¹ External urinary catheters and other alternatives will significantly decrease the CAUTI rates.³

- Lack of education about external urinary catheters leads to increased use of indwelling Foley catheters.
- Educating the ICU staff on the importance of using external urinary catheters and alternatives will decrease CAUTIs.⁷

METHODS

The **Model for Evidence-Based Practice Change** was used to guide this project.⁴

- Step 1 Assessing the need for change in practice
- Step 2 Locating the best evidence
- Step 3 Critically analyzing the evidence
- Step 4 Designing practice change
- Step 5 Implementing and evaluating change in practice
- Step 6 Integrating and maintaining change in practice

Deliverables:

1. PowerPoint Presentation
2. Posters & Bulletin Board Display
3. Pre- and Post-Survey Evaluation
4. Handout
5. Brochure
6. In-service Training

REFERENCES

- ¹Brachitta, M., Maugeri, A., Evara, G., Riela, P., La Mastra, C., Rosa, M., Magnano San Lio, R., Gallo, G., Mura, I., & Agodi, A. (2021). Cluster analysis identified patients at risk of catheter-associated urinary tract infections in intensive care units: findings from the PSIN-UTI Network. *Journal of Hospital Infection*, 107, 57-63. <https://doi.org/10.1016/j.jhin.2020.09.030>.
- ²Garcia, R. (2023). Review of scientific literature on external collection devices (ECD) in the prevention of catheter-associated urinary tract infections (CAUTI). *American Journal of Infection Control*, 52(7), s35. <https://doi.org/10.1016/j.ajic.2023.04.063>
- ³Goris, A., McMullen, K., Dunn, G., Wade, R., Leach, K., & Lowe, I. (2020). Quick to wick: external female catheter and urinary catheter utilization. *American Journal of Infection Control*, 48(8), S7. <https://doi.org/10.1016/j.ajic.2020.06.15>
- ⁴Melnik, B., & Fineout—Overholt, E. (2019). *Evidence-based practice in nursing and healthcare: A guide to best practice*. Wolters Kluwer.
- ⁵Monday, L., Suleyman, G., Alangaden, G., Schuldt, S., Jackman, C., & Halash, C. (2021). Impact of female external urinary catheter on indwelling catheter use and catheter-associated urinary tract infection rates. *Antimicrob Steward Health Epimedol*, 1(S1), s5. <https://doi.org/10.101017/ash2021.11>.
- ⁶Van Decker, S., Bosch, N., & Murphy, J. (2021). Catheter-associated urinary tract infection reduction in critical care units: bundled care model. *BMJ Open Quality*, 10(4), e001534. <https://dx.doi.org/10.1136/bmjopen-2021-001534>.
- ⁷Wills-Lee, S., & Dunleavy, S. (2023). To what extent is education for urinary catheter insertion and management offered to registered nurses in the United Kingdom? *International Journal of Urological Nursing*, 1-11. <https://doi.org/10.1111/ijun.12364>.

INTERVENTIONS

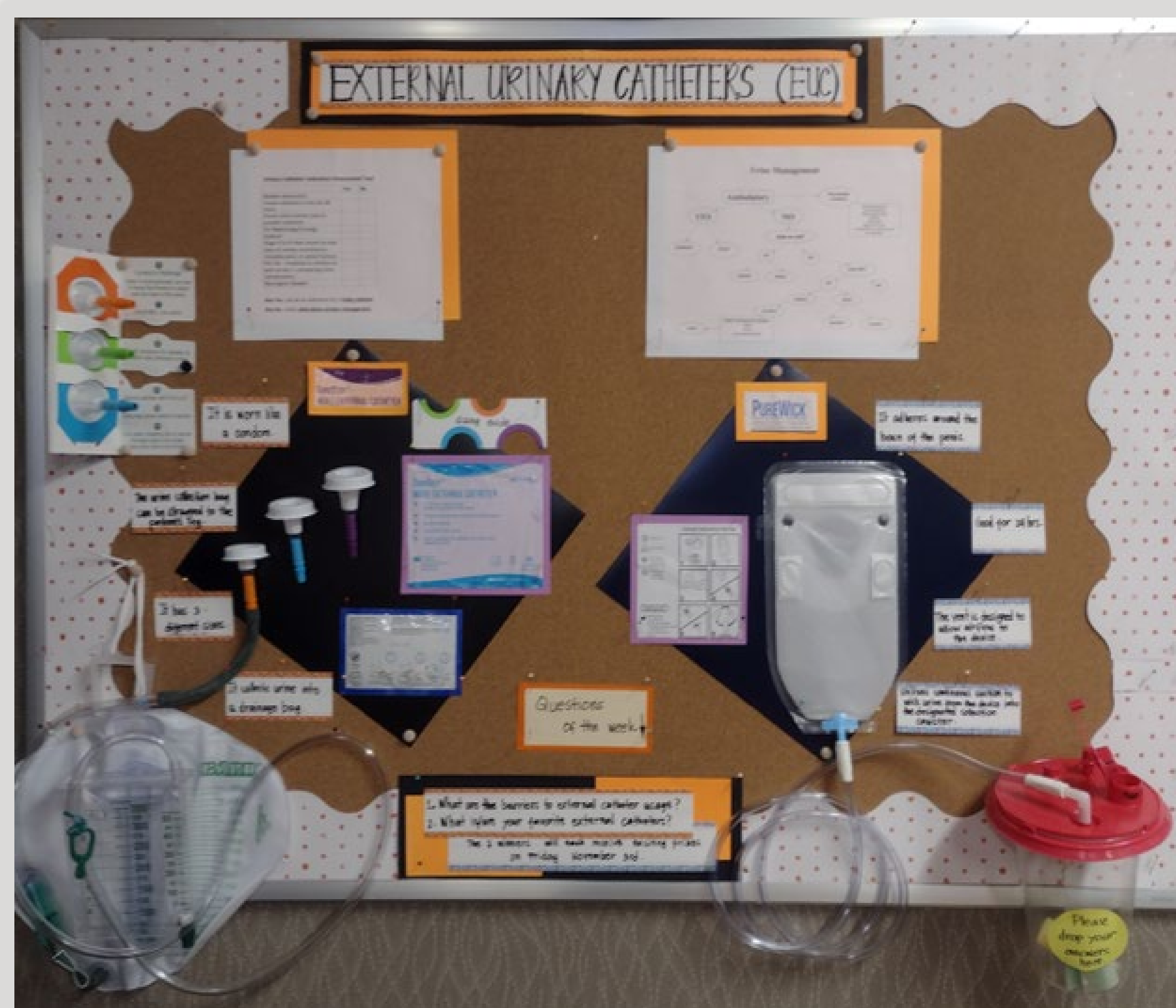
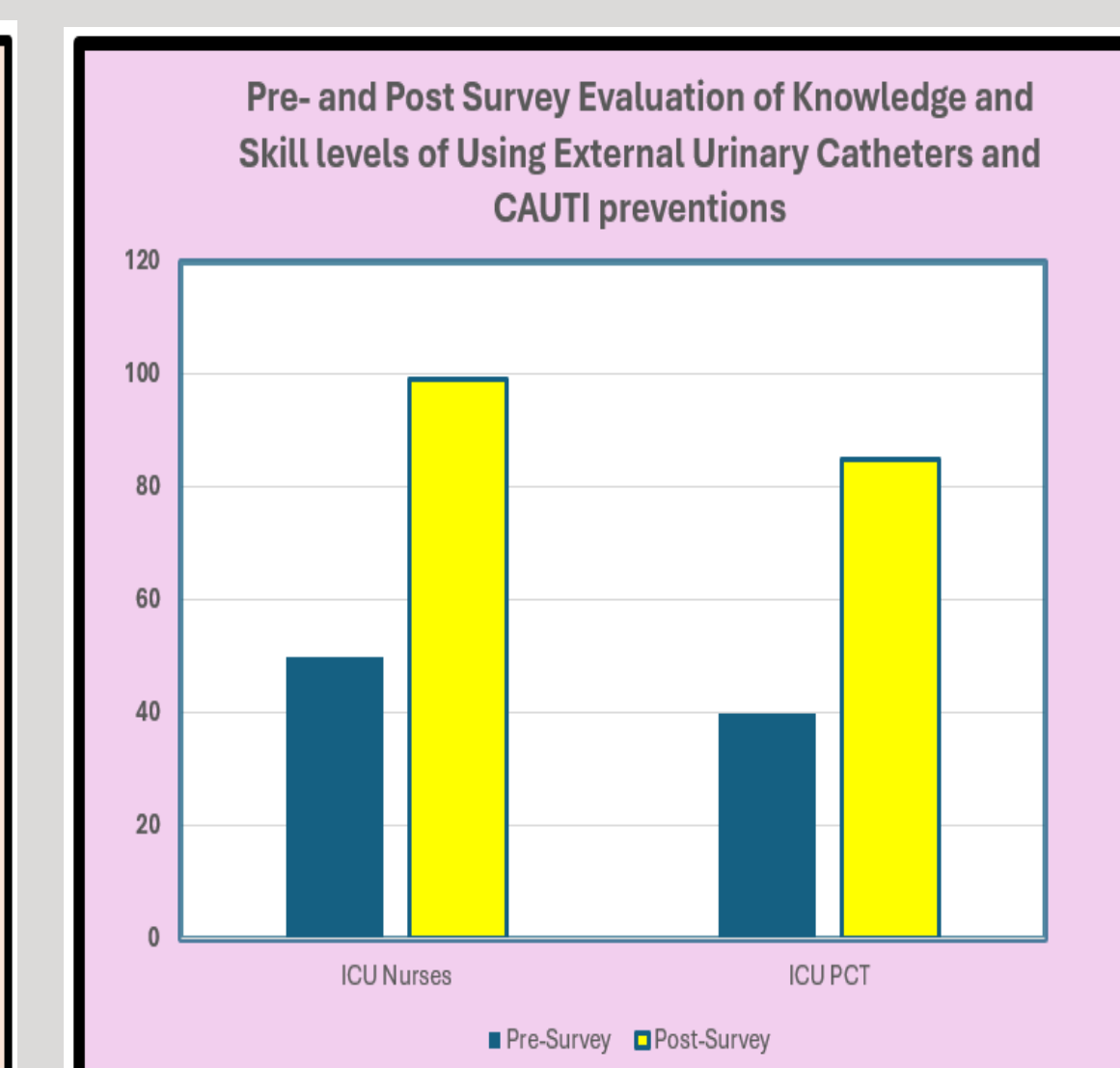
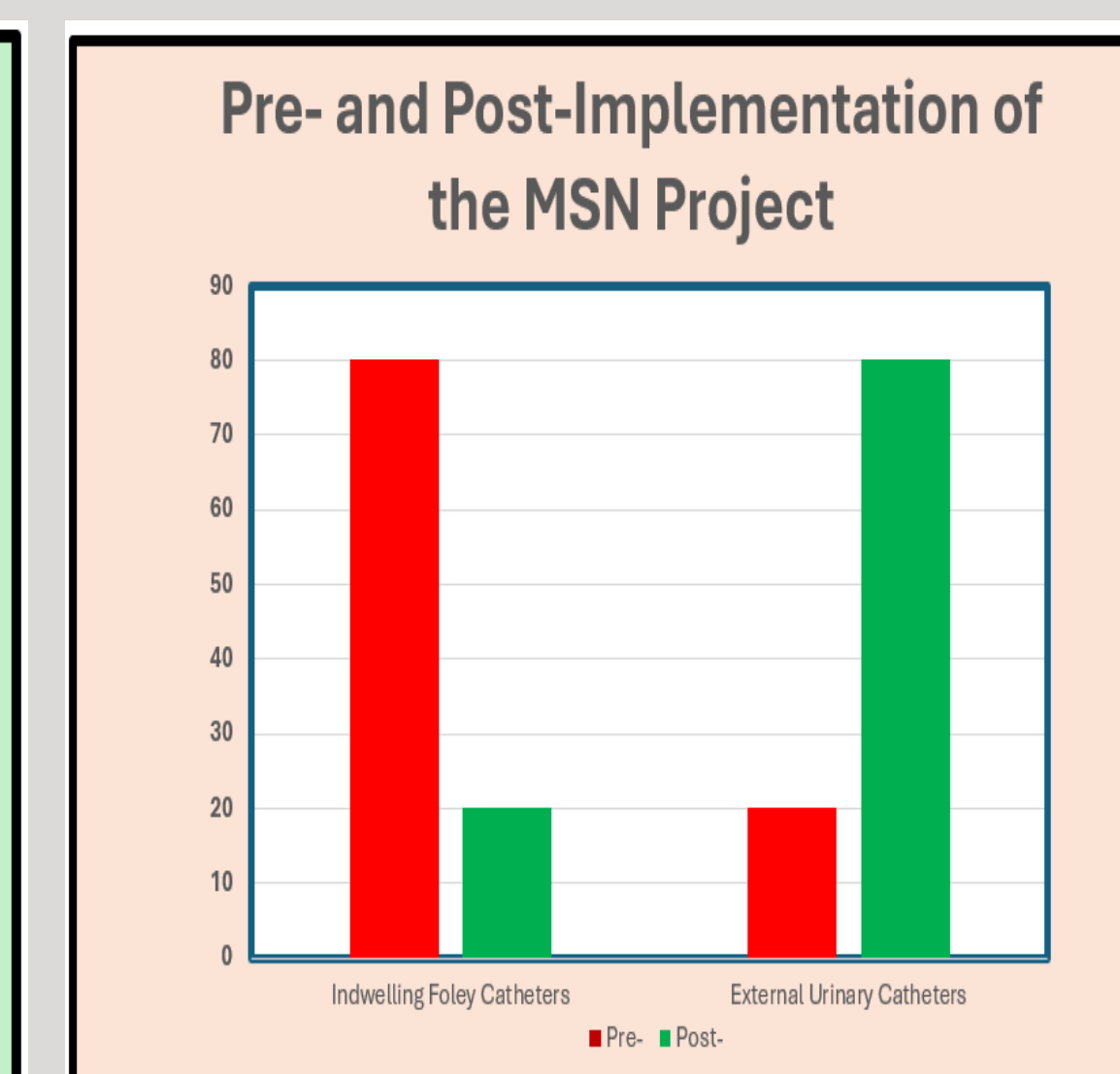
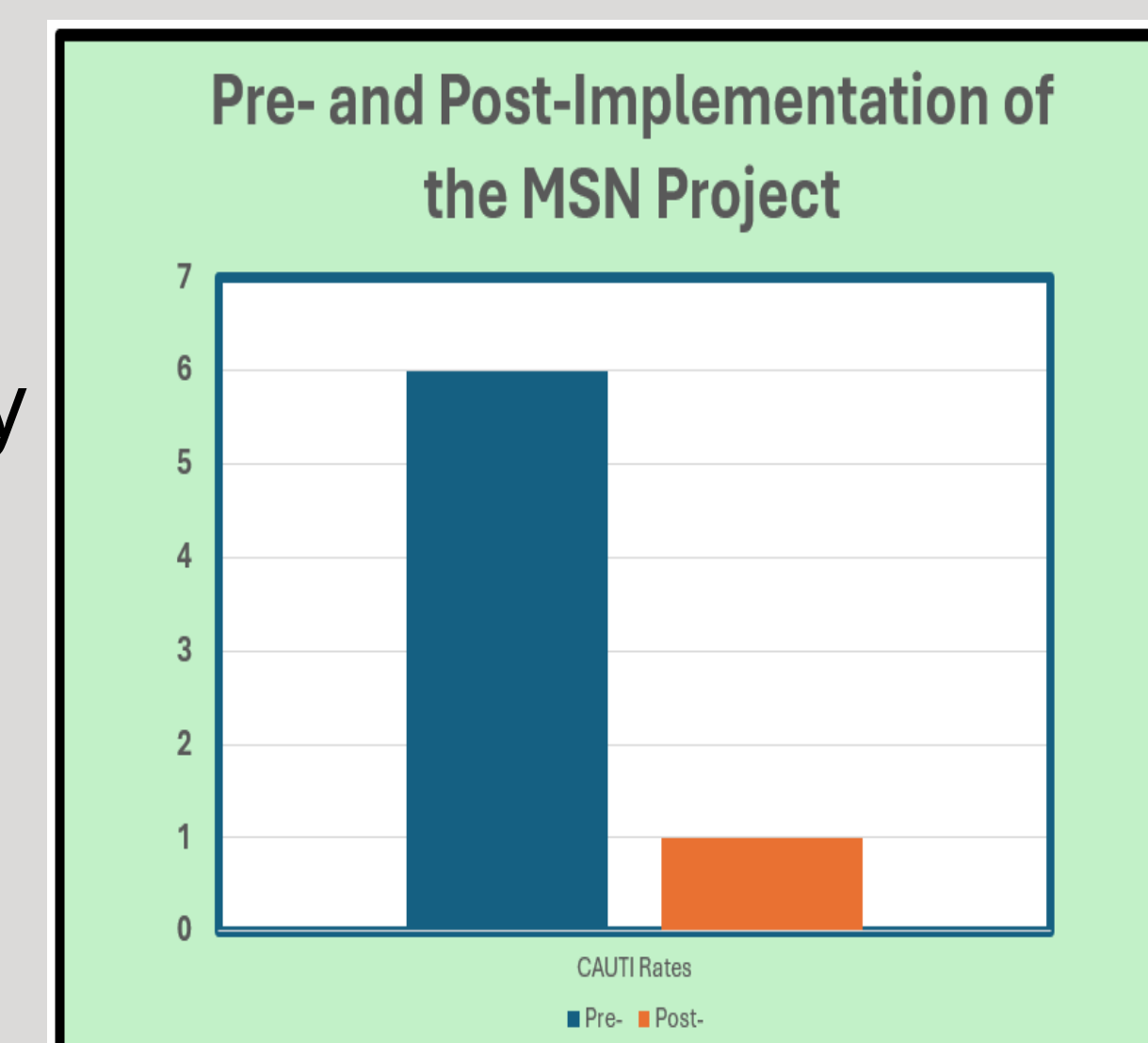
Interventions, actions and/or performances to take to make this project a reality:

- Step 1 Meetings with stakeholders
- Step 2 Distribution of pre-evaluation survey questionnaires
- Step 3 Presentation of deliverables
- Step 4 In-service training and pass-off skills
- Step 5 Monthly audit of CAUTIs, utilization of indwelling and external urinary catheters
- Step 6 Distribution of post-evaluation survey questionnaires
- Step 7 Final meeting and presentation with all the stakeholders

IMPACTS

Educating staff about CAUTI prevention and the importance of utilizing external urinary catheters and other alternatives has a significant impact to:

- Reduce CAUTI rates
- Decrease the use of indwelling urinary catheters
- Increase the use of external urinary catheters
- Increase knowledge and skills of staff using the external urinary catheters
- Encourage staff to advocate for patients by using the external urinary catheters first.



External Urinary Catheters Bulletin Board Display

CONCLUSIONS

- Unnecessary placement of indwelling Foley catheters in the ICU puts patients at high risk for CAUTIs or Catheter-Associated Urinary Tract Infections.
- Patients with CAUTIs can lead to severe health outcomes, increased costs, prolonged hospitalization, and increased morbidity and mortality.⁵
- Using external urinary catheters and other alternative methods can effectively prevent and decrease CAUTIs.^{2,6}
- Educating the ICU nurses and patient care technicians on the importance of preventing CAUTIs, and the use of external urinary catheters will reduce CAUTI rates, decrease the use of indwelling Foley catheters, and increase utilization of external urinary catheters.⁷