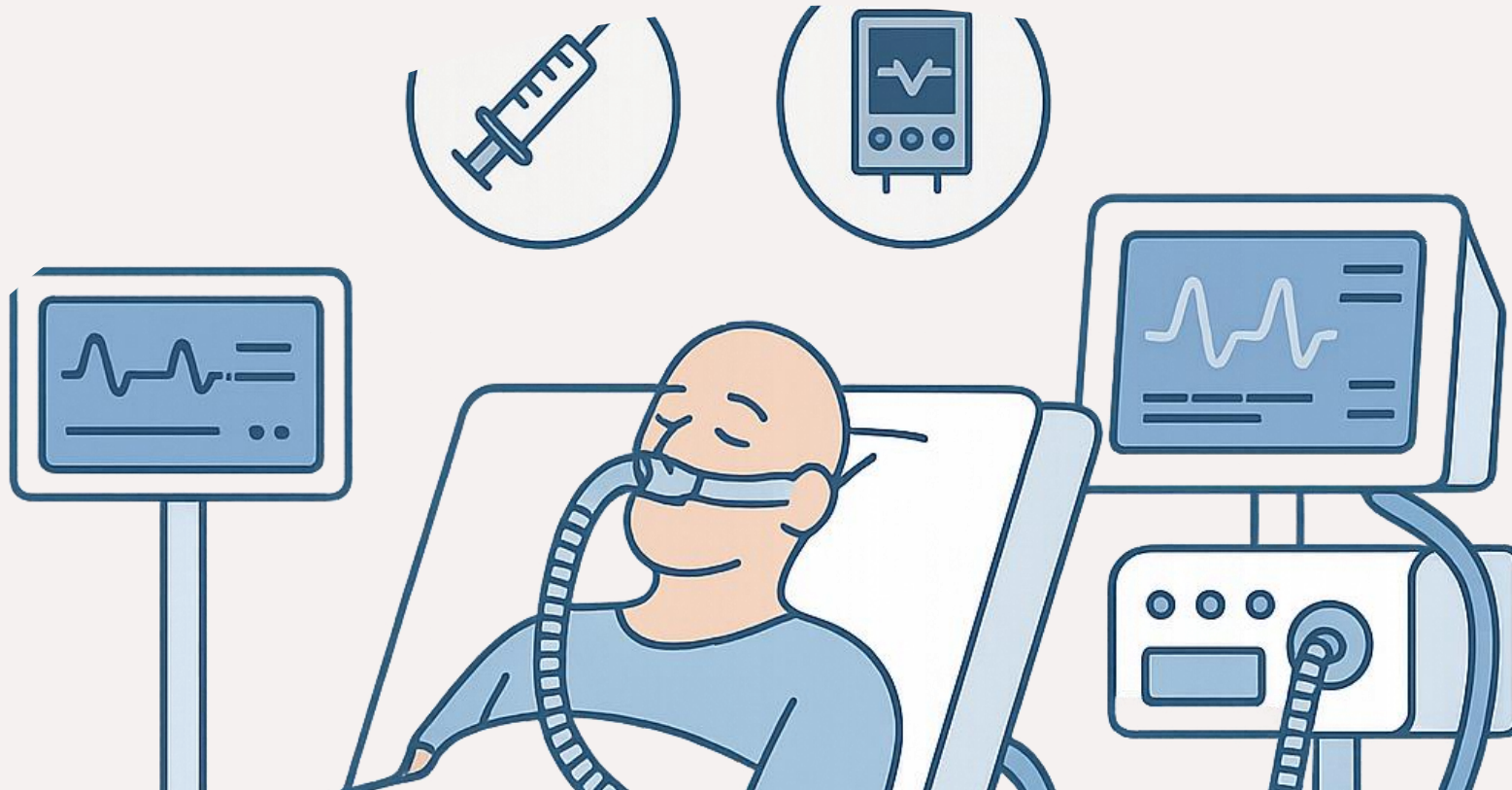


A Multi-Disciplinary Improvement Project to enhance Sedation Hold Practices and reduce Patient-Ventilator Time

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Introduction

- What are Sedation Holds?

Temporary cessation of sedation to allow neuro assessment & aid weaning.

- Why are they important?

↓ Ventilator time

↓ ICU length of stay

↑ Survival & patient-family interaction

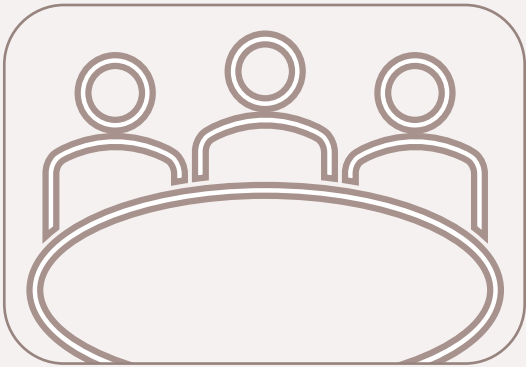
Local problem: Inconsistent practice → room for improvement



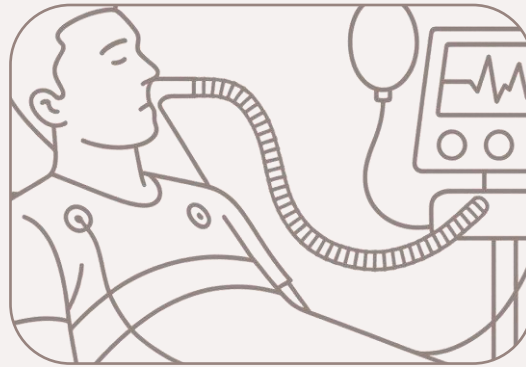
Aim & Objectives

Aim: Improve sedation hold practice and patient outcomes

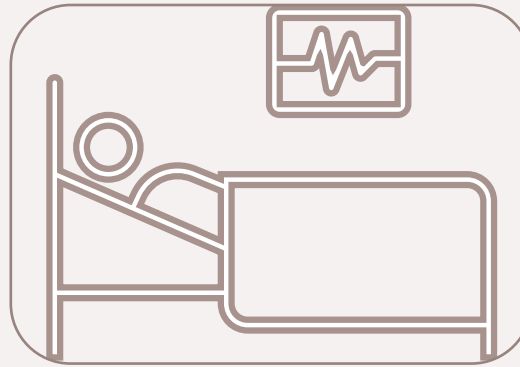
Objectives:



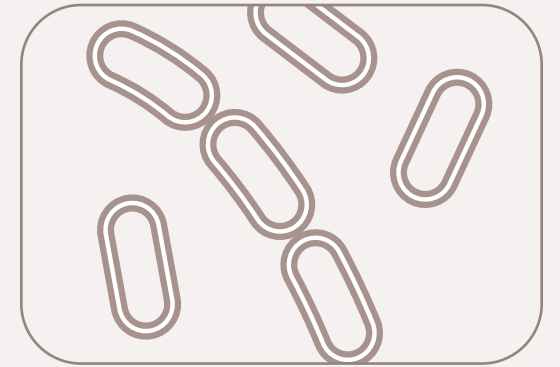
Increase MDT
confidence



Reduce patient-
ventilator time



Improve patient
experience



Reduce ventilator-
associated
complications

Methods: Setting & Baseline

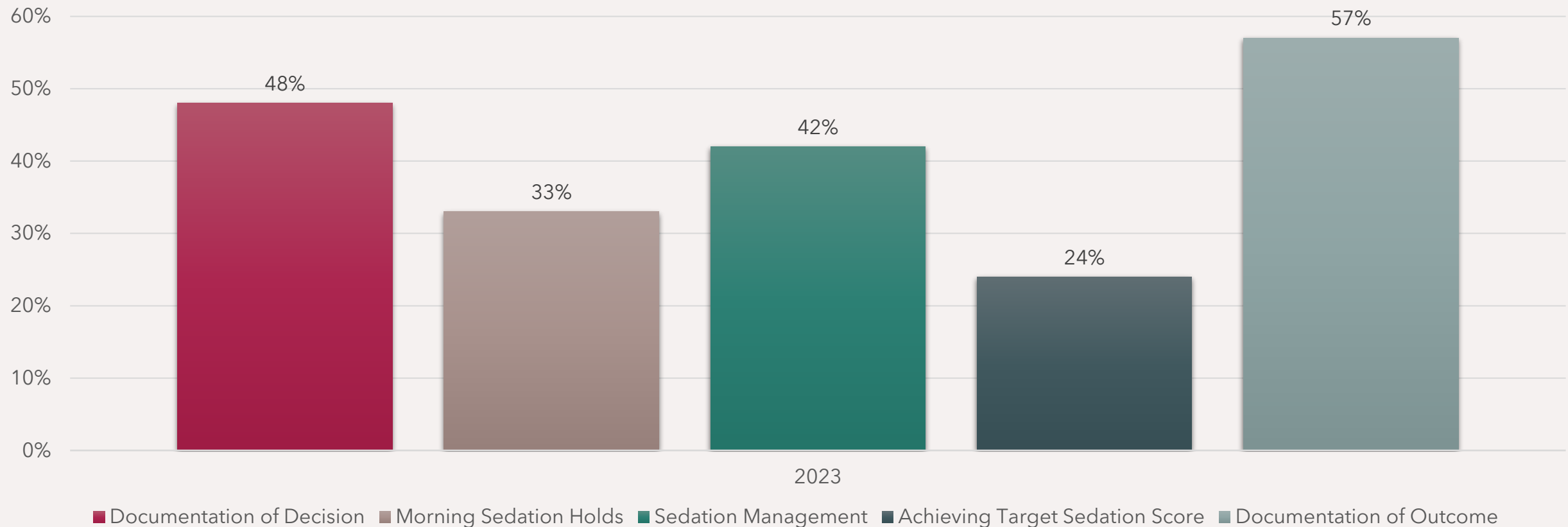
- ❑ 3 ICUs within one NHS Trust.
- ❑ Audit approval secured.

Baseline data:

- Retrospective manual collection from electronic observation system.
- Measured aspects of sedation holds & extubation timings.



Baseline Data Collection

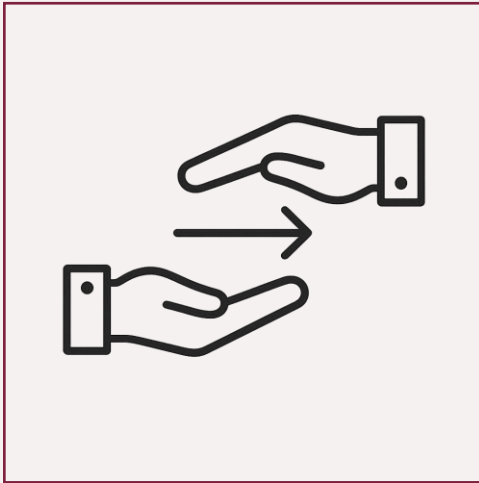




**The way to get
started is to quit
talking and
begin doing.**

Walt Disney

Methods: Interventions



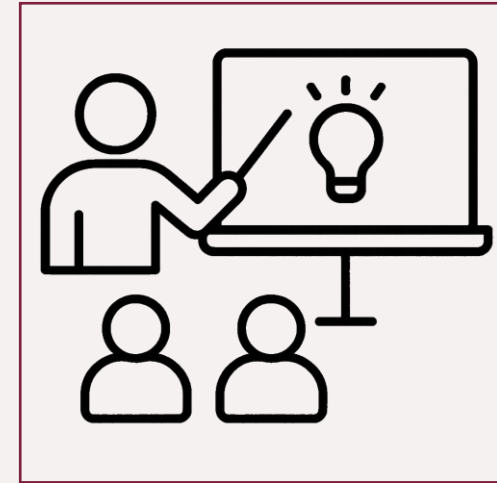
Priority System

At morning handover:
Identify patients for
potential extubation.



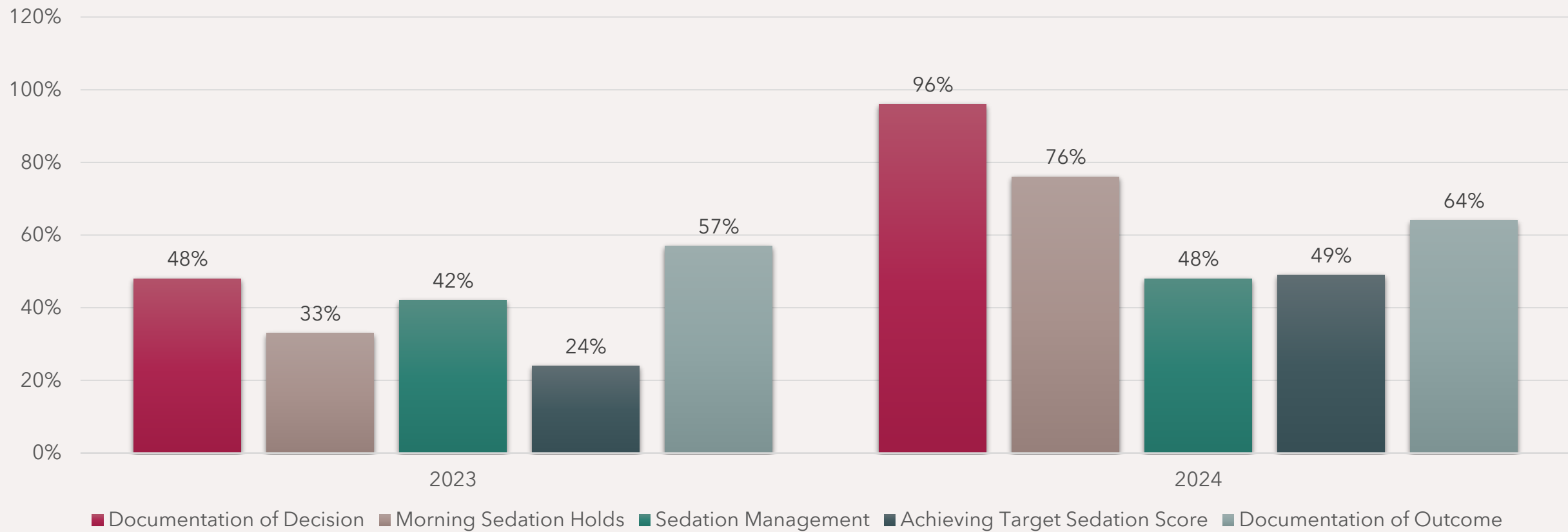
Process

Structured daily decision-making.
Clear communication across MDT.



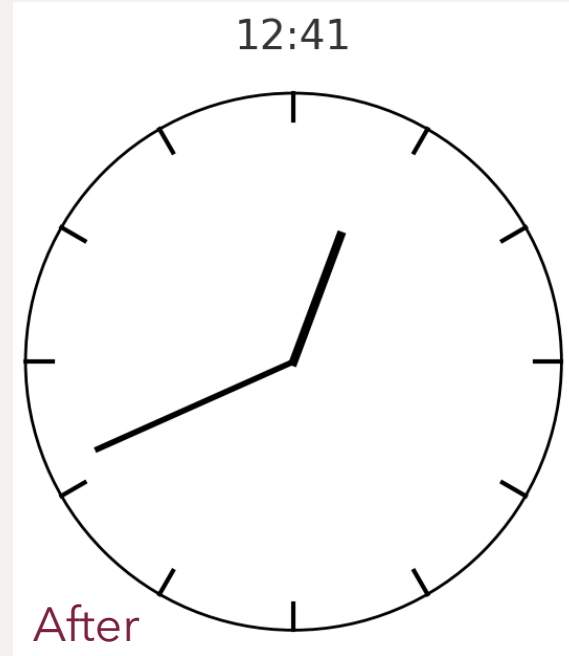
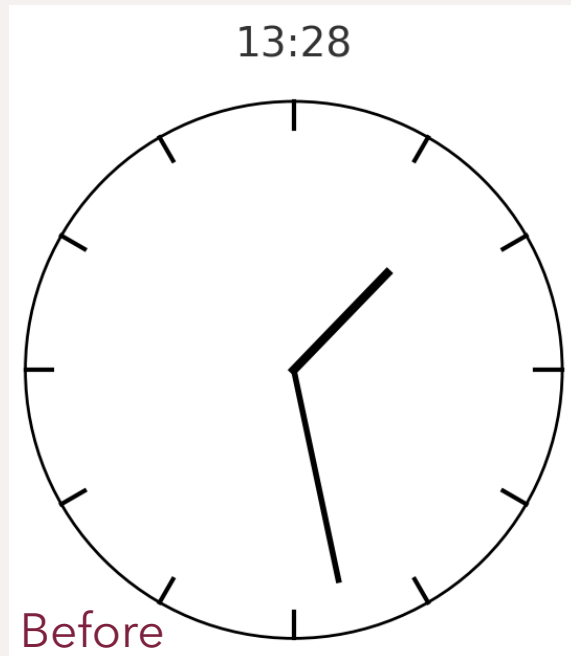
Education Strategies

For whole MDT with focus areas
Nursing - Sedation Management
Medics - Extubation Eligibility



Results (Graph)

Average extubation time ↓ by ~1 hour



Earlier family interaction



Reduction in ventilation-related complications

47% identified for extubation → 56% extubated in morning

Results (Headline)



Increased confidence in
sedation hold practices



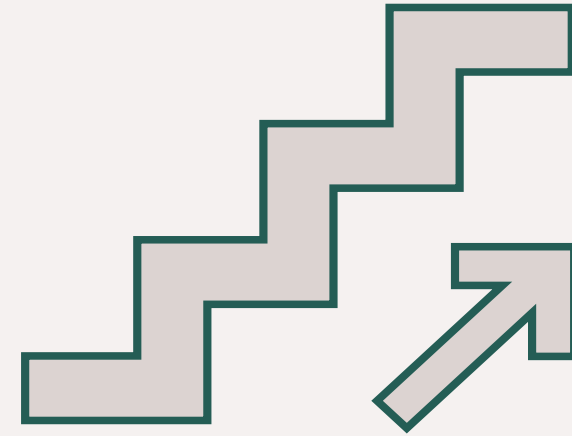
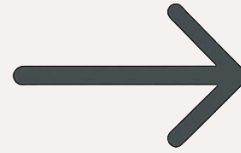
More efficient
communication at handover



Consistent approach across
units

Results (MDT Impact)

Implications for Practice

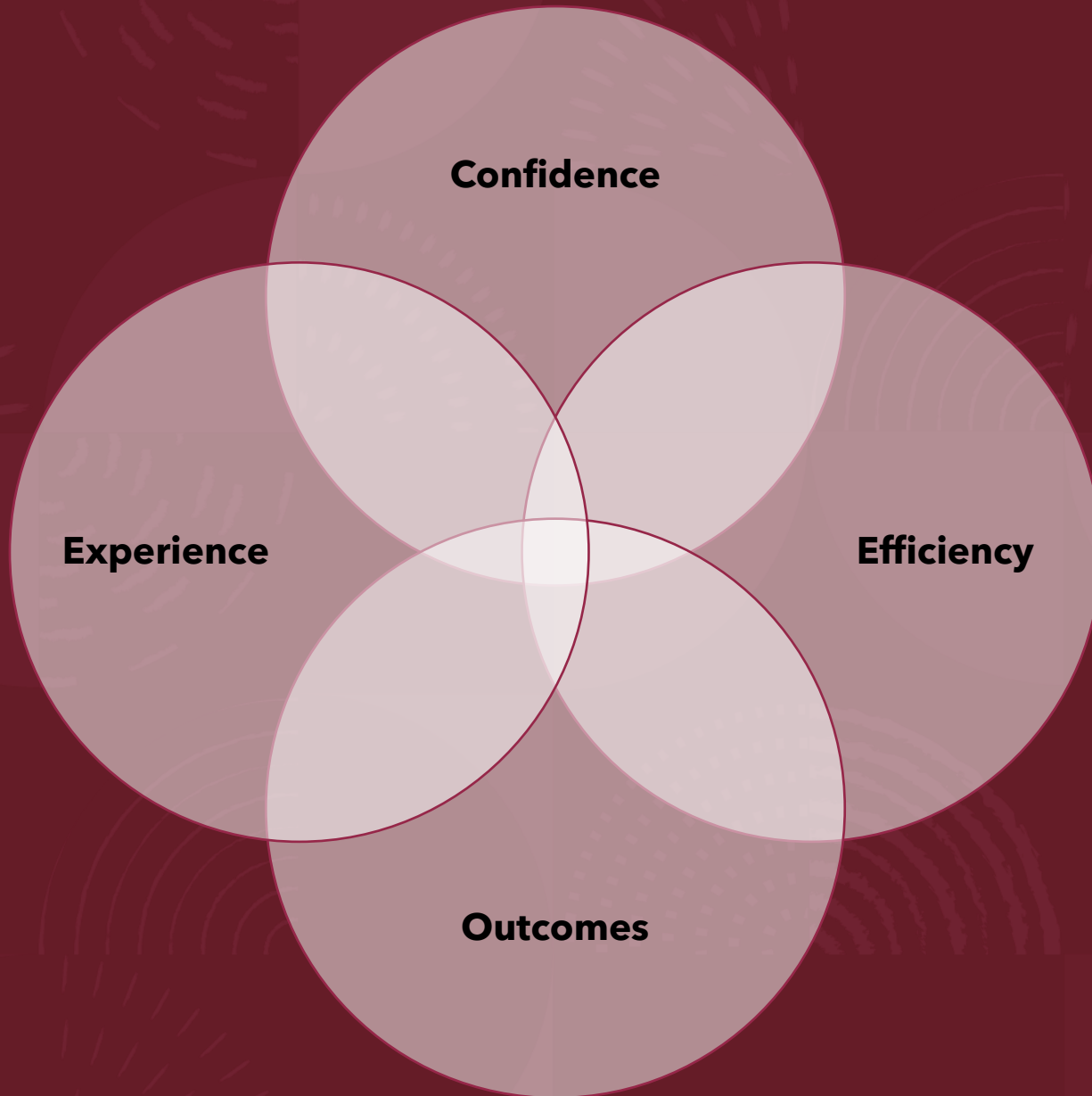


Benefits realised:

- Better patient outcomes & experiences.
- Improved flow & safety.

Next steps:

- ☐ Update Guidelines
- ☐ Standardised extubation checklist
- ☐ Sustain education & audits
- ☐ Potential wider rollout (e.g. Neuro / Cardiac CC)



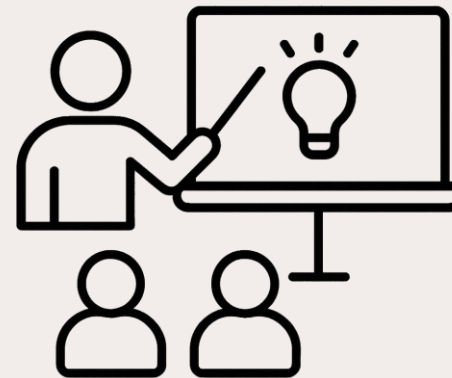
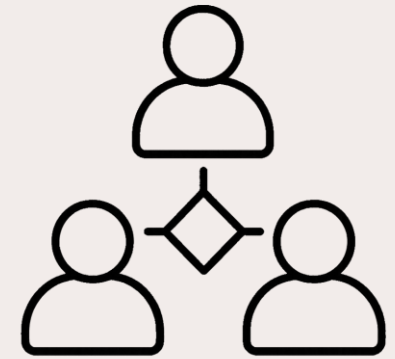
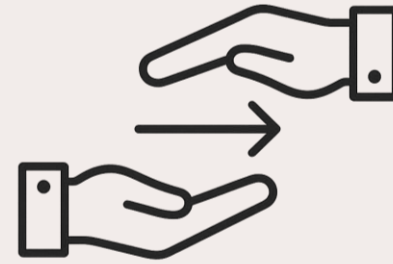
Conclusion

- ❑ Sedation holds = simple, high-value intervention
- ❑ Priority system + education = measurable improvement
- ❑ Improved patient, family, and MDT experience.
- ❑ Ongoing work will embed and sustain success.

Thank you

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References

- Chen, T., Chung, Y., Chen, P., Hu, S. H., Chang, C., Hsieh, S., Wang, B., & Chiu, H. (2022). Effects of daily sedation interruption in intensive care unit patients undergoing mechanical ventilation: A meta-analysis of randomized controlled trials. *International Journal of Nursing Practice*, 28(2). <https://doi.org/10.1111/ijn.12948>
- Devlin, J., Skrobik, Y., Gélinas, C., Needham, D., Slooter, A., Pandharipande, P., Watson, P.L., Weinhouse, G.L., Nunnally, M.E., Rochwerg, B., Balas, M.C., van den Boogaard, M., Bosma, K.J., Brummel, N.E., Chanques, G., Denehy, L., Drouot, X., Fraser, G. L., Harris, J., ... & Alhazzani, W. (2018). Clinical Practice Guidelines for the Prevention and Management of Pain, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption in Adult Patients in the ICU. *Critical Care Medicine*, 46(9), 825-873. <https://doi.org/10.1097/CCM.0000000000003299>
- Gage, W. (2013). Using service improvement methodology to change practice. *Nursing Standard*, 27(23), 51-58. <https://doi.org/10.7748/ns2013.02.27.23.51.e7241R1>
- Graham, N. D., Graham, I. D., Vanderspank-Wright, B., Varin, M. D., Penno, L. N., Fergusson, D. A., & Squires, J. E. (2022). A systematic review and critical appraisal of guidelines and their recommendations for sedation interruptions in adult mechanically ventilated patients. *Australian Critical Care*, 1-13. <https://doi.org/10.1016/j.aucc.2022.10.011>
- Hutton, B., Burry, L. D., Kanji, S., Mehta, S., Guenette, M., Martin, C. M., Fergusson, D. A., Ashikari, N. K., Egerod, I., Williamson, D., Straus, S., Moher, D., Ely, E. W., & Rose, L. (2016). Comparison of sedation strategies for critically ill patients: a protocol for a systematic review incorporating network meta-analyses. *BMC Systematic Reviews*, 5(1), 157. <https://doi.org/10.1186/s13643-016-0338-x>
- Kress, J. P., Pohlman, A. S., O'Connor, M. F., & Hall, J. B. (2000). Daily interruption of sedative infusions in critically ill patients undergoing mechanical ventilation. *The New England Journal of Medicine*, 342(20), 1471-1477. <https://doi.org/10.1056/NEJM200005183422002>
- Pearson, S. D., & Patel, B. K. (2020). Evolving targets for sedation during mechanical ventilation. *Current Opinion in Critical Care*, 26(1), 47-52. <https://doi.org/10.1097/MCC.0000000000000687>
- Vagionas, D., Vasileiadis, I., Rovina, N., Alevrakis, E., Koutsoukou, A., & Koulouris, N. (2019). Daily sedation interruption and mechanical ventilation weaning: a literature review. *Anaesthesiology Intensive Therapy*, 51(5), 380-389. <https://doi.org/10.5114/ait.2019.90921>