

# Bundle Me Up: Implementing a Standardized Ventilator Associated Pneumonia (VAP) Prevention Bundle to Decrease VAP Rates

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## Background

VAP is a growing problem in intensive care units around the United States. Its incidence around the United States varies and has been reported to affect anywhere between 5-40% of patients requiring mechanical ventilation for over 48 hours. Not only does this effect the health of our patients, but can also be a considerable burden to the hospital and health care systems. Its estimated the cost of a single VAP can be as high as \$40,000 and reduction of even one VAP in our patient population can have a large impact.

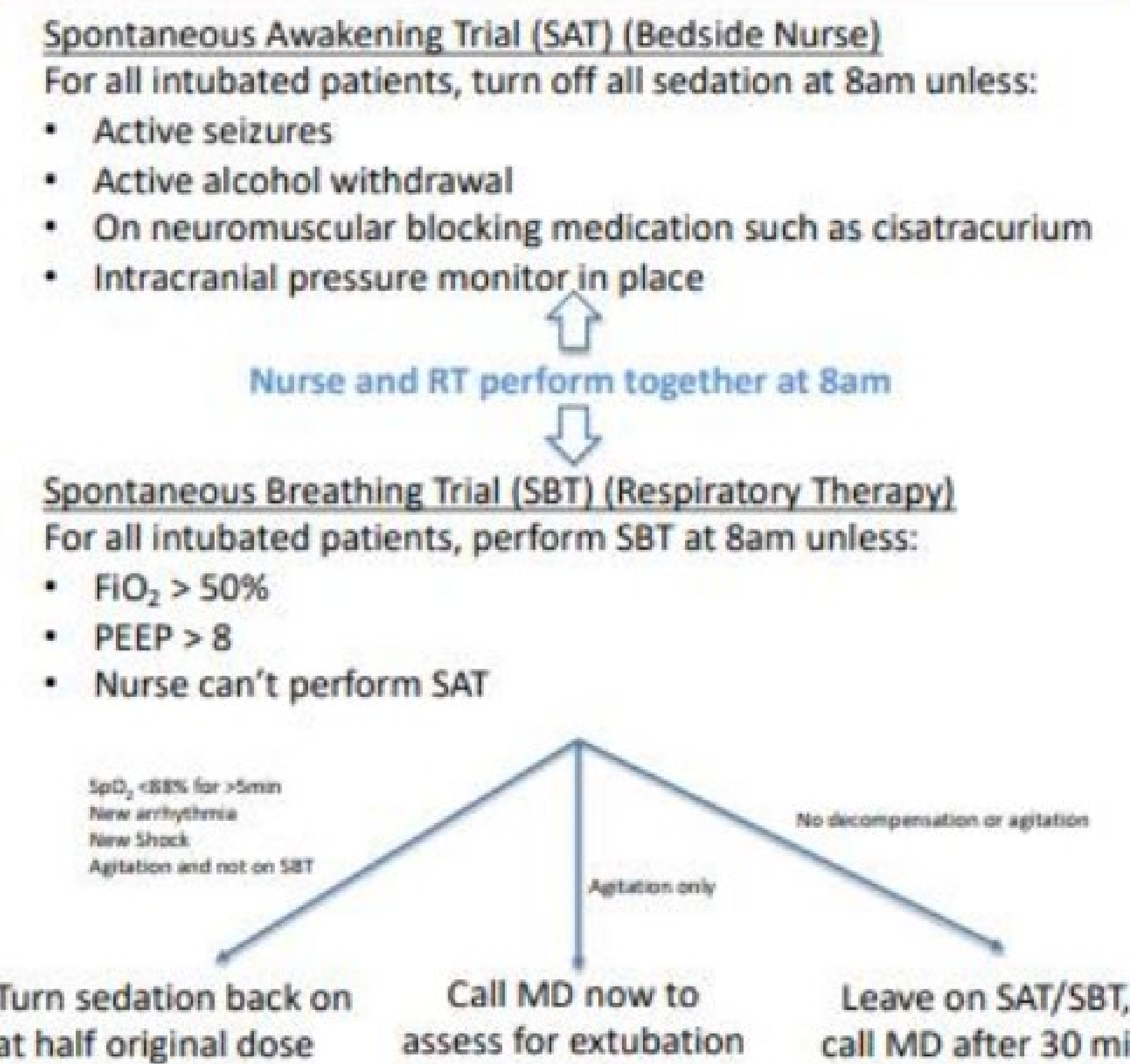
## Objectives

To decrease VAP rates in the surgical/trauma intensive care unit

## Methods

A new VAP bundle was created to standardize the SAT/SBT and extubation process in the surgical and medical intensive care units. We then compared VAP rates and ICU length of stay in all intubated surgical ICU patients in the 6 months prior to and after implementation of the VAP bundle.

### Daily Spontaneous Awakening and Breathing Trials (SAT/SBT)



## Conclusions

The newly implemented VAP bundle has decreased VAP rates by over 50% and should continue to be utilized in our ICUs.

There is also room for more investigation into other strategies that may decrease ventilator days and ICU length of stay.

## References

1. Centers for Disease Control and Prevention. (January 2023). NHSN Pneumonia (Ventilator-associated [VAP] and non-ventilator associated Pneumonia [PNEU]) Event. <https://www.cdc.gov/nhsn/pdfs/pscmanual/6pscvcapcurrent.pdf>
2. Papazian, L., Klompas, M. & Luyt, CE. Ventilator-associated pneumonia in adults: a narrative review. Intensive Care Med 46, 888–906 (2020). <https://doi.org/10.1007/s00134-020-05980-0>

## Results

	Pre-VAP Bundle (297)	Post-VAP Bundle (303)
<b>VAP Occurrences</b>	13 (0.043%)	6 (0.019%)
<b>ICU Length of Stay (Days)</b>	8.49	7.34

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