# Bundle of Strength: A Collaborative Care Approach to Reduce Length of Stay in Rib Fracture Recovery

KyLee Bowers, MSN, RN, CCRN Clinical Practice Specialist, Critical Care





### **Objectives**

- Recognize the impact of the nursing role in implementing preventative measures that improve patient outcomes
- Explain the evidence-based components of the Trauma Care Bundle
- Explain how standardized documentation tools can improve interprofessional communication and consistency of care
- Identify strategies to implement similar care bundles within their own trauma or specialty units



#### Salem Health

- Licensed as 644 bed
- Non-profit
- Certified Level II Trauma Center
- TRACS team: Trauma and Acute Care Surgery
  - Surgical Intensivists managing
     SICU patients
- Critical Care Tower:
  - 2 Intensive Level Units
    - (48 beds)
  - 4 Intermediate Level Units
    - (102 IMC beds)





## Background... The WHY

Complications increase hospital length of stay

In 2023, of the 267 rib fracture patients,
 9% had complications (delirium, VAP, DVT, unplanned ICU transfers or intubation)

- Average LOS: 8.22 Days
  - No complications 6.95 days
  - Any complications LOS: 22.1 days!

#### **Root causes:**

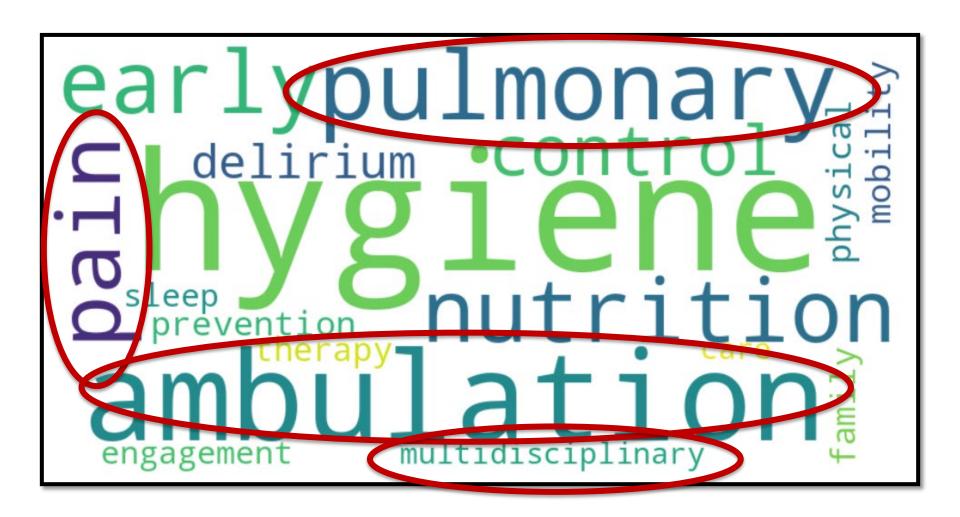
- Inconsistent goals and activities from nursing
- No standardization of care for Trauma Patients

# What do you think!?













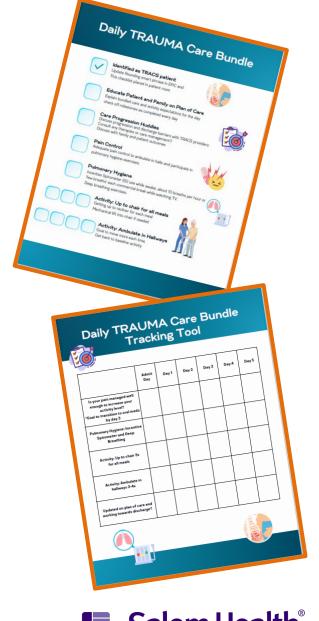
#### Purpose

- Decrease LOS for rib fracture patients.
- Created the "Trauma Care Bundle" (TCB) that focused on best practices
  - Smartphrase in EMR
  - Reported on specific best practices and pt progression
  - Updated daily



#### **Actions**

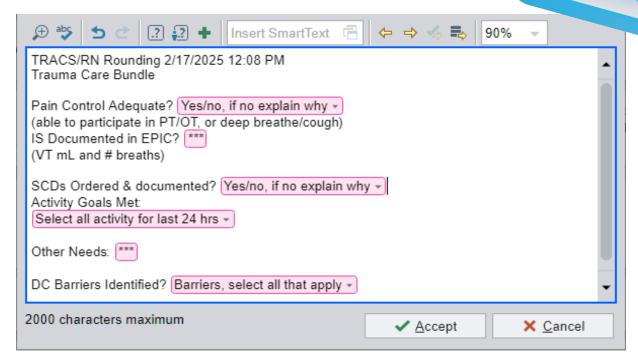
- ✓ Found a gap
- ✓ Literature Review
- Stakeholders gathered for consensus
- Creation of TCB
- Education (nursing and providers)
- Start! Audit for compliance and adjust





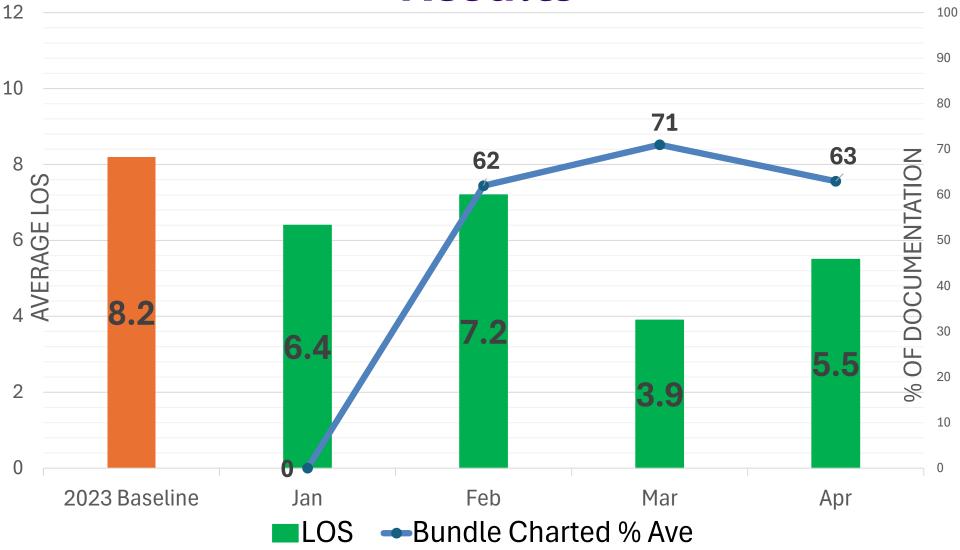
# **Smartphrase**

- Document Smart Phrase by 0900 before APP Rounds
- ACCURATE documentation





#### Results





#### **Pearls of Wisdom**

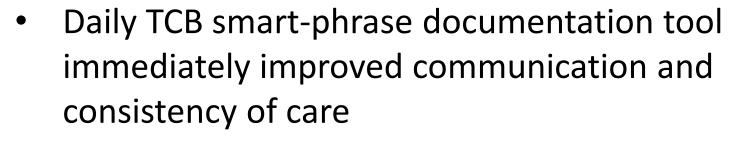
- Change the mindset of this is "extra work" to this is "expert work" as evidence-based care for Trauma Patients is delivered by exceptional teams
- Consistency is key on process changes and creating multiple reminders, visually and verbally
- Include the whole care team: Charge RNs, bedside RNs, CNAs, MDs, NPs, etc.







## **Conclusions/Implications**





- LOS decreased by 30% and improved documentation compliance, up to 65%
- Nursing has tremendous power to improve patient outcomes
- Model is easily adaptable to other specialties





### Acknowledgements

Trauma Care Unit's Leadership team Champions- Shay and Christy

Trauma Medical Director, Dr. Windell APP Lead: Amy Hanson, NP

ESPECIALLY the A4E Nursing Staff for the hard work and care they provide every day





## **Questions?**

kylee.bowers@salemhealth.org





#### References

- Kroeker, J., Wess, A., Yang, Y., Al-Zeer, B., Uppal, H., Balmes, P., Som, R., Courval, V., Lakha, N., Brisson, A., Sakai, J., Garraway, N., Tang, R., Rose, P., & Joos, E. (2024). Chest trauma clinical practice guideline protects against delirium in patients with rib fractures. Trauma Surgery & Acute Care Open, 9(1). https://doi.org/10.1136/tsaco-2023-001323
- Weinberg, B., Roos, R., & van Aswegen, H. (2022). Effectiveness of nonpharmacological therapeutic interventions on pain and physical function in adults with rib fractures during acute care: A systematic review and meta-analysis. South African Journal of Physiotherapy, 78(1), 1-9. https://doi.org/10.4102/sajp.v78i1.1764
- Yeh, K., Spence, N., Beaulieu-Jones, B.R., Taylor, M., Jhaveri, A., Centola, K., Charise, T., Orf, J., & Richman, A. (2023). Reduced rates of pneumonia after implementation of an electronic checklist for the management of patients with multiple rib fractures at a level one trauma center. Surgery in Practice and Science, 14. https://doi.org/10.1016/j.sipas.2023.100192

