Improving Use of a Standardized Medical ICU Order Set

Drs. Ernesto Munoz, Sesha Sai Kanakamedala, Ramzy Daoud, Suhail Saad-Omer & Aarushi Varshney

Mentors: Drs. Tristan Tanner, Alexander Kong, Joshua Shultz & Ashwini Komarla

Internal Medicine Residency

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Area of Interest/Problem Statement

- The ICU is one of the sites in which medical errors are most likely to occur because of the complexity of care as well as lack of communication between providers on transfer of care to the ICU.¹

- Multiple studies have shown that use of standardized order sets (SOS) for admission helps to decrease hospital length of stay, adverse events, and hospitalization costs.¹

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¹ “ICU Outcomes.” Philip R. Lee Institute for Health Policy Studies, healthpolicy.ucsf.edu/icu-outcomes.
Area of Interest/Problem Statement

- In December 2021, 1/3 of residents based on survey, were not aware of an ICU order set at HCA Florida Osceola Hospital.
  - 40% rarely utilized it.
  - Only 29% were satisfied with the order set.

- The average nurse level of satisfaction with the current ICU Admission Process was 6.8/10. (10 = Very Satisfied)

- From July 2021-February 2022 the ICU Admission order set was used 30% of the time.
Baseline Condition

- In a random review of 70 MSICU patients in Sept. and Oct. 2022:
  - 9% were missing **Code Status** orders
  - 34% did not have **VTE Prophylaxis** orders including SCDs
  - 40% had no **Bowel Regimen**
- In Oct. 2022, 20 ventilated patients were reviewed, 70% had no intubation order, 15% did not have updated ventilator settings orders, and 75% had no weaning order.
Survey of Intern Calls for Orders - Preintervention

*8 interns surveyed on rotation in 12/21
*4 interns surveyed on rotation in 9-10/22

Blue - number of calls
Orange - if the resident thought the call could have been prevented by an order set

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Aim

By March 2023, our new standardized medical ICU admission order-set will be utilized in at least 50% of all ICU admissions at HCA Florida Osceola Hospital.

We will aim for a nursing satisfaction with the final process of at least 8/10.
Interns are getting many calls about missing orders

Basic orders are not placed

No systematic way to review and go through necessary orders

People are not using the order set

Resident are not aware of the order set and Order set missing key components

No formal introduction to Order set and outdated Order Set

Root Cause Analysis: 5 Why’s
New ICU Order Set

- Went live in mid to late 11/2022

New Additions: Ventilator orders, GI Px, VTE Px, Bowel Regimen, Electrolyte Protocol, Antiemetics, Sedation
Interventions

• New ICU Order set went live 11/2022

• Increased awareness of ICU Order set by utilizing flyers, emails, morning report, and AHD announcements 12/22-1/23.
ICU Order Set Usage

From 7/1/21-2/28/22 the ICU Admission Order set was used 30% of the time.

From 12/1/22 – 3/31/23 the ICU Admission Order set was used 53% of the time.
Resident and Nursing Satisfaction

- In 12/21: The average Nurse level of satisfaction with the current ICU Admission Process was 6.8 / 10. (10 = Very Satisfied)

- In 2/23: The average Nurse level of satisfaction with the current ICU Admission Process was 7.1 / 10. (10 = Very Satisfied) based on 23 surveys, Range 2-10. Median 8/10
Resident and Nursing Satisfaction

- In December 2021, 1/3 of residents surveyed were not aware of an ICU order-set.
  - 40% rarely used it.
  - Only 29% were satisfied with the order set.

- In March 2023, 80% of residents were aware of the ICU order-set
  - 60% Used it most of the time
  - 66% were satisfied
Results:

ICU Orders Review Data

- NO Resuscitation order
- NO VTE pp
- NO BM regimen

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Conclusion

- Improving the comprehensiveness of an ICU admission order set and promoting its consistent usage led to more complete care for critically ill patients and improved resident and nursing satisfaction.

- Continuous engagements with both residents and nurses will help to encourage consistent use of the ICU order set and updates for further improvements.
Thank You