



Early Nutritional Interventions for Patients At Risk for Malnutrition

BACKGROUND

- Delays in initiating nutrition interventions contribute to patient malnutrition.
- Malnutrition contributes to hospital acquired pressure injuries (HAPIs) and increase hospital length of stay (White et al., 2016).
- 2016 ASPEN national guidelines emphasize initiating feeding for qualifying patients within 24-48 hours of ICU admission (White et al., 2016).

LOCAL CONTEXT

- Inconsistencies found using the admission malnutrition screen to capture malnourished patients.
- A second assessment tool – the nutrition portion of the Braden Scale, was available to capture more patients who could benefit from supplemental feeding.
- Delay in initiating feeding noted in Critical Care Unit.

PURPOSE

- To improve early identification of malnourished patients.
- Promote early nutrition for *At Risk Patients* in Critical Care with a goal of initiating feeding within 24-48 hours.
- Aims – Develop a standardized procedure (STP) to guide the process allowing RNs to initiate enteral trickle feeding to patients meeting criteria and who do not yet have an MD/dietician order.

REFERENCES

Available on request: Connie.Lin@stjoe.org

EDUCATION

Braden Score Education

- Dietary consult and initiation of STP 990 required for a score of 1 or 2 (NPO, eats less than half of meal)
- All intubated patients automatically score 1

METHODS

Design – Evidence-based QI project
Sample – At Risk/Malnourished patients
Setting – Critical Care Units-SJO

Procedure:

- Multi-disciplinary team formed: RNs, dietary, physicians.
- Audits completed to establish baseline data:
 - Of patients intubated for 3 days or more, how many who met inclusion criteria and were identified as “at risk” received early intervention?
 - What was the average length of stay for patients who received early intervention?
 - Does addressing nutrition earlier decrease HAPI rates?
- STP 990 *Early Nutrition Interventions for at Risk Patients* developed and approved.
- Pre-education audits (first two columns of table) and post-education audits (last two columns of table) to determine effectiveness of project.

RESULTS AND OUTCOMES

	July 2017	August 2017	November 2018	December 2018
# Patients intubated over 3 days and also met STP-990 inclusion criteria	7	5	4	4
Hospital Length of Stay:				
Min	4 days	6 days	14 days	10 days
Max	13 days	17 days	26 days	30 days
Average	8.5 days	11.5 days	20 days	20 days
Cases with ADM screen within 24 hours	4	4	3	4
Cases with Braden Scale complete at admission	7	5	4	4
Cases with Braden change from admission	5	2	2	2
Cases with Dietitian consult order	7	3	4	4
Skin issues POA	1	1	1	1
HAPU occurred	0	1	0	0
Enteral routes				
PO	3	3	0	0
OGT	1	0	3	0
NGT	1	1	0	1
PP	2	1	1	3
Time to enteral feeding				
<24 hrs	1	1	1	0
24-48 hrs	3	1	3	4
>48 hours or NO ET	3	3	0	0

DISCUSSION / IMPLICATIONS FOR PRACTICE

- Small sample which hinders evaluation of how RNs are implementing early nutritional interventions.
- Early nutrition is just one component of the plan of care. A comprehensive evaluation of other contributing factors needs to be conducted to decrease HAPIs & length of stay.
- In the future, STP 990 can be used as a guideline for other units on how to address malnutrition

CONCLUSIONS

- Early nutrition is the gold standard for patients at risk for malnutrition.
- In the small pool of ICU patients who met inclusion criteria, an improvement was seen both in early identification and early nutritional intervention when comparing baseline audits to post STP 990 and education.