

Background

- Nutrition is Key Component of Maintenance of Skin integrity and adequate wound healing
- The Braden Scale is currently used in EMMC to determine risk for pressure injuries in hospitalized patients
- Compared to other interventions prescribed by the Braden tool, nutritional supplementation and management is on of the costliest to implement on a hospital-wide scale
- There has been shown to be an overall cost-reduction with the implementation of large-scale nutritional overhaul in the inpatient setting

Practice Change

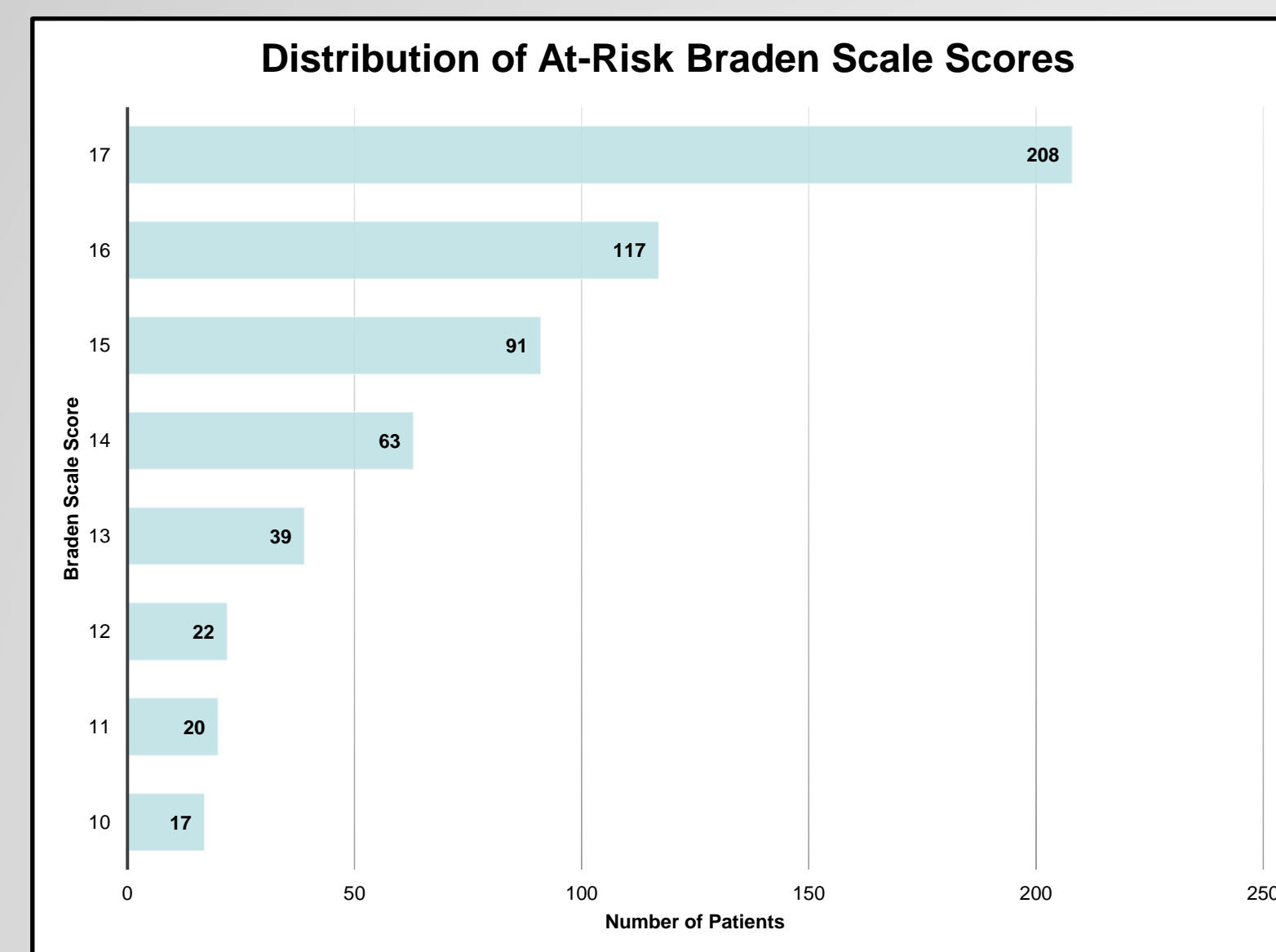
Maximize nutrition of inpatients, especially older adults and those experiencing extended hospital stays, who are most at-risk of developing pressure injuries.

Methods

- Data was gathered from EMR charts of patients admitted to Grant 6 at EMMC The authors highlighted patients whose average Braden score was less then 18 during their hospital admission, indicating increased risk for pressure injury. Patients where also included who scored a “inadequate” or “very poor” nutrition subcategory of the Braden score.
- The data gathered was used to determine whether a nutritional consult where being used in a timely and effective manner to decrease the risk of pressure injuries in these high-risk patients.

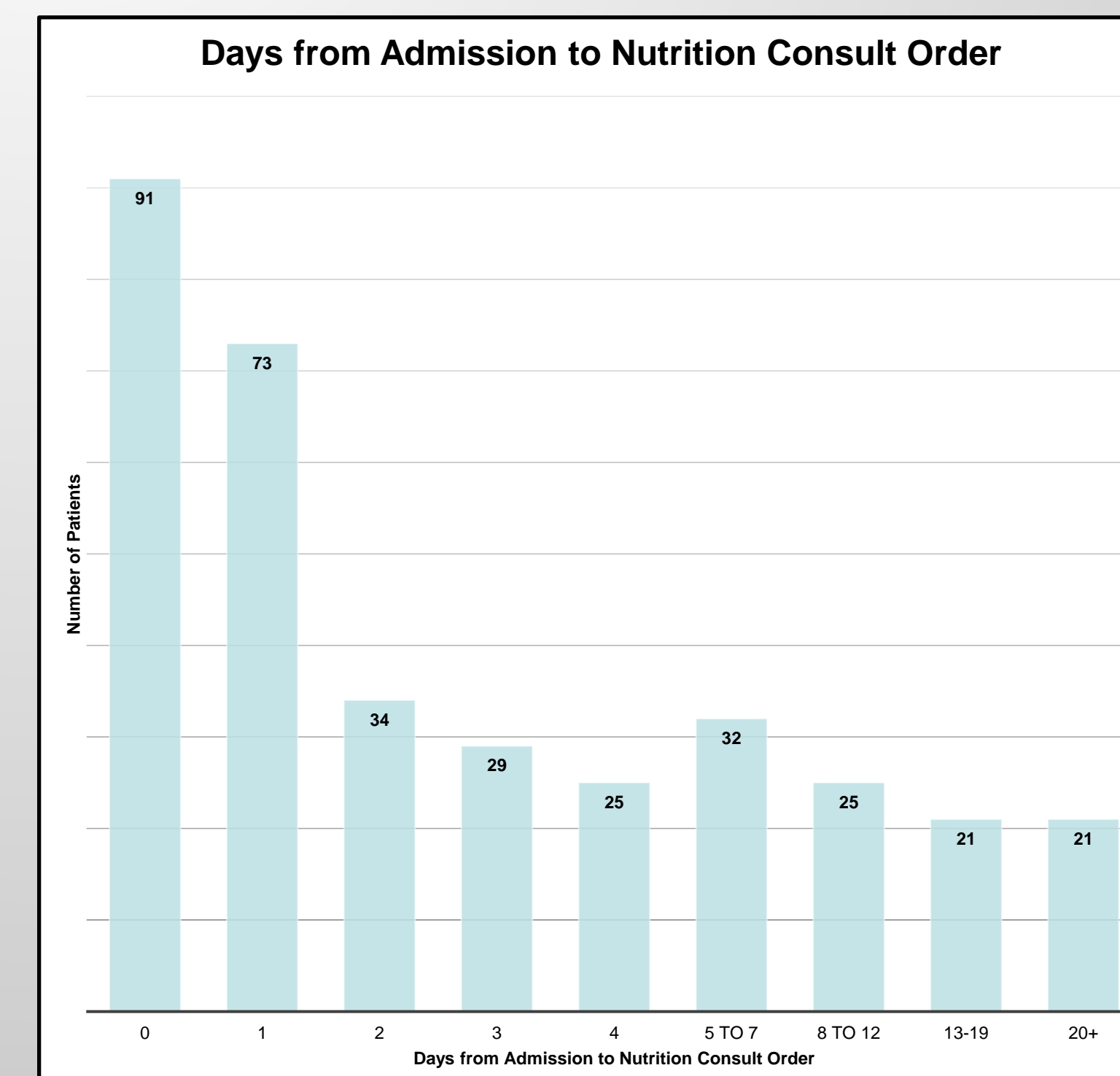
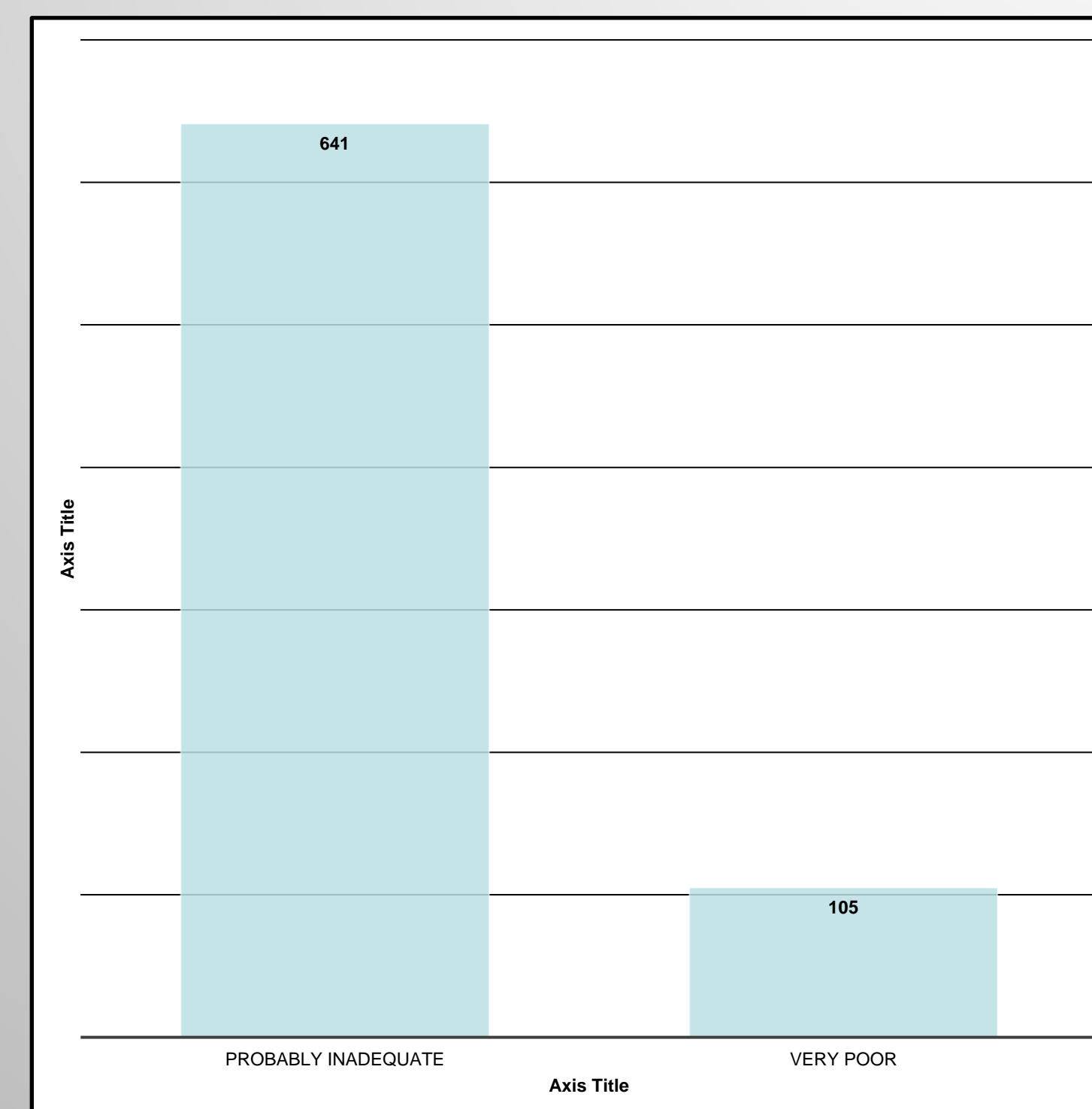
Results

Patients who are high risk for skin breakdown with low Braden scores.



- We Reviewed 1572 Patient charts on Grant 6
- 577 Patients were deemed to have a Braden score less than 18.
- 746 Patients nutritional intake where deemed “probably inadequate” or “poor” through assessments from staff
- Of the 351 Patients who received orders for a nutritional consult, data shows that the 164 Pt.’s were seen in 1 day, 34 in 2 days, 29 in 3 days, 25 in 4 days, 32 took a week, and 67 patients took 8-20+ days to be seen

Patients Nutritional Score and Days from Admission to Consult



Summary/Discussion

- **Next Steps:**
 - Integration of age into the current risk assessment for pressure injury development
 - Creation of a “Braden diet” for patients determined to have “inadequate” or “very poor” nutritional status..
- **Barriers of this Study:**
 - Tracking follow-up on nutritional consults to determine changes to patients’ nutritional status post hospitalization
 - Difficulty to determine if nutrition alone decreases risk for pressure injuries since other intervention are being applied in the in-patient setting..

Conclusion

- Nutritional interventions require significant investment on the part of the institution, large scale roll-out of nutritional management for the prevention of pressure injuries remains a difficult and labor-intensive process.
- Order to Consult time has must be worked on since these patients who have poor nutrition also have poor Braden scales which may result in integumentary damage if not followed up on appropriately.
- Much work remains to be done on management of nutrition for hospitalized patients.

References

Alderden, J., Cummings, M., Pepper, G., Whitney, J., Wilson, A., Butcher, R., ... Thomas, D. (2017). Midrange Braden Subscale scores are associated with increased risk for PRESSURE injury development among critical care patients. *Journal of Wound, Ostomy & Continence Nursing*, 44(5). doi:10.1097/jwn.0000000000000368

Banks, M. D., Graves, N., Bauer, J. D., & Ash, S. (2012). Cost effectiveness of nutrition support in the prevention of pressure ulcer in hospitals. *European Journal of Clinical Nutrition*, 67(1), 42-46. doi:10.1038/ejcn.2012.140

Hengstermann, S., Fischer, A., Steinhagen-Thiessen, E., & Schulz, R. (2007). Nutrition status and pressure ulcer: What we need for nutrition screening. *Journal of Parenteral and Enteral Nutrition*, 31(4), 288-294. doi:10.1177/014860710731004288